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TRANSACTIONS

OF THE

HISTORIC SOCIETY

OF

LANCASHIRE AND CHESHIRE.

VOLUME XI.

SESSION 1858-59.

LIVERPOOL:

ADAM HOLDEN, 48, CHURCH STREET.

1859.



LIVERPOOL:

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This Volume has been edited by the Assistant Secretary, under the direction of the Council. The writers of Papers, however, are alone responsible for the facts and opinions contained in their respective communications.

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EXPLANATORY NOTE.

The Plate entitled "Signatures of the Warrington Tutors," was presented complete, by Mr. Bright, in illustration of his own Paper. The eight plates accompanying the Paper "On the Arming of Levies in "Wirral," were presented complete, by the Author, Mr. Mayer. All the remaining plates were produced wholly at the cost of the Society.

Subjects of Papers to be read before the Society during the *Twelfth Session*, will be advertised in the *Mercury* on the Tuesday, and in the *Daily Post* on the Wednesday, preceding each Meeting; and in the *Northern Times* on the day of Meeting.

ERRATUM.

Page 239, line 4, for Mercuriam read Mercurium.

COUNCIL AND OFFICERS FOR 1859-60

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The High Sheriff of Lancashire.

The High Sheriff of Cheshire.

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Assistant Secretary.

J. H. GENN, Esq., 9, Sugnall Street, Liverpool.

^{*} In accordance with Law XX, the Council added the three elected Vice-Presidents, the Librarian and Curator, to all the Sectional Committees.

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DESCRIPTION OF THE PLATES ILLUSTRATING MR. MAYER'S PAPER.*

Plate I. fig. 1, a cross-bow; 2, windlass for stringing the bow; 3, another form of cross-bow; 4, 5, a bow, an arrow, and six arrow heads of different forms, found in a tomb at Thebes in Egypt.

Plate II. fig. 2, a musket with match holder; 1, a wheel-lock gun, the first improvement on the match-lock; 3, a musket (brown Bess) used by the soldiers at the present time.

Plate III. fig. 1, a double wheel-lock gun, intended to fire twice out of the same barrel; 2, a musket rest; 3, 4, touch-boxes; 5, a bullet mould; 6, a spanner, used for winding up wheel-locks; 7, a bandelier, with bullet-bag and match; 8, a dagge or pistol.

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Plate VI. figs 2, 4, bylls; 1, 3, halberds; 5, a demi-lance; 6, the usual weapon of pikemen.

Plate VII. fig. 1, a sallet worn by bowmen; 2, a skull-cap; 3, a plate-coate; 4, a corselet; 5, a burgonet; 6, a murrion.

Plate VIII. Riflemen, with Enfield rifle, cartridge pouche, cap pouche, whistle, bayonet and sword-bayonet; 2, a breech-loading rifle; 3, the breech-loading rifle when open to receive the cartridge, A.D. 1859.

^{*} These illustrations are from specimens in Mr. Mayer's Museum,

LIST OF MEMBERS.

SESSION XI. 1858-9.

The first List was dated 23rd November, 1848; all whose names appeared in it, are therefore Original Members. Those who have been enrolled as Mayors or Sheriffs have their year of office attached.

The letter P. denotes that the Members in connexion with whose names it occurs, have read Papers before the Society.

Those whose names are printed in SMALL CAPITALS are Members of the Council; and in italics are Life Members.

Those marked thus * are Resident. The post town Liverpool is usually omitted.

A

23rd Nov., 1848. Ainslie, Montague, Grizedale, Hawkshead, Windermere. Allcard, William, 43, Upper Brook street, Grosvenor 6th Dec., 1855. square, London.

17th Dec., 1857. *Anderson, Thomas Darnley, 5, India buildings, Water street, and 37, Northumberland terrace, Everton.

3rd May, 1849. *Anderson, Thomas Francis, Holly lodge, Fairfield, and 3, Cable street.

Ansdell, John, St. Helen's. 4th Dec., 1856.

Ansdell, Richard, 7, Victoria road, Kensington, London. Arrowsmith, P. R., The Ferns, Bolton. Artingstall, George, Warrington. 23rd Nov., 1848.

15th Sept., 1854. 2nd Dec., 1858.

Aspland, Rev. R. Brook, M.A., Frampton villas, South P. 11th May, 1854. Hackney, London.

14th Dec., 1848. *Astley, John, Philadelphia chambers, Hackin's hey, and Rock Ferry, Birkenhead.

2. 9th Oct., 1854. Atherton, Henry, Sutton, Prescot.

P. 9th Oct., 1854.

H. Sh. Cheshire, 1857.

n. Cheshire, 1857. Atkinson, William, Ashton heyes, Chester. 23rd Nov., 1848. *Avison, Thomas, F.S.A., Treasurer, 18, Cook street, and Fulwood park, Aigburth.

B

8th June, 1854. *Banning John Johnson, 20, Castle street.

Mayor Man., 1851-53. Barnes Robert, Brookside, Manchester. 7th Jan., 1858. *Batten, Charles, 87, Lord street, and 74, Chatham

street. P. 6th Dec., 1849. Beamont, William, Warrington. 21st May, 1857. *Bean, Edwin, Revenue buildings. 30th Dec., 1854. *Bean, William, Revenue buildings, and 56, Berkeley street.

15th April, 1858. *Bell, Christopher, Back Goree. 23rd Nov., 1848. *Bell, Henry, Orange court, and Grosvenor road, Claughton, Birkenhead.

Bell, John Gray, 11, Oxford street, Manchester. 6th April, 1854.

15th Nov., 1854. *Belshaw, John, Wason buildings, 4, Harrington street. 9th Dec., 1852. Benn, Edward, Ballymena, Ireland.

23rd Nov., 1848. *Bennett, William, Sir Thomas' buildings, and 109, Shaw street.

3rd Dec., 1857. *Berry, Percival, 7, Union court.

15th April, 1858. *Berry, J. R., James street.7th March, 1850. Birch, Sir Thomas Bernard, Bart., The Hazles, Prescot.

23rd Nov., 1848. Birchall, Thomas, Ribbleton hall, Preston.

23rd Nov., 1848. *Bird, William, 9, South Castle street, and Wood Hey, Spittall.

Birley, Rev. John Shepherd, Halliwell hall, Preston. 4th March, 1852.

Birley, T. Langton, Carr hall, Kirkham. 8th Jan., 1852.

Black, J., M.D., F.G.S., 2, George's square, Edinburgh. 6th Dec., 1855.

Blackburne, John Ireland, The Hall, Hale. 23rd Nov., 1848.

20th Sept., 1854. *Blackmore, William, 1, Exchange street West, and Hooton, Cheshire.

Bloxam, Frederick William, F. 3, Liverpool and Lon-20th Sept., 1854. don chambers.

23rd Nov., 1848. *Blundell, Thomas Weld, Ince Blundell, Great Crosby. Böock, Frederick Robert Paul, 86, Newman street, 30th Dec., 1854. Oxford street, London.

5th May, 1853. Booth, Benjamin Witham, Swinton, Manchester.

1st May, 1856. Booth, John Billington, Preston, and Foxholes, near Lancaster.

Bossi, Arthur, Paris. 15th Dec., 1853.

Bostock, Rev. H., M.A., Grammar school, Warrington. 31st Sept., 1854. 3rd Jan., 1856. *Bouch, Thomas, 1, Oldhall street, and New Brighton.

23rd Nov., 1848. *Boult, Francis, Richmond buildings, and Devonshire road, Claughton.

P. 23rd Nov., 1848. *Boult, Joseph, North John street, and Parkfield road, Aigburth road.

8th Dec., 1851. Bourne, Cornelius, Stalmine hall, Preston. 15th April, 1858. *Bowers, Anthony, Vauxhall foundry.

Bowes, John, Blue Coat School, Warrington. 6th Dec., 1855. 13th Nov., 1851. Brackstone, R. H., Lyncombe hill, Bath.
15th Dec., 1853. Bradbury, Charles, Salford crescent, Manchester.
17th Dec., 1857. *Bradley, Thomas, 52, Bold street, and 18, Kenyon

terrace, Birkenhead.

17th Dec., 1857. *Bradley, William Gibson, 52, Bold street, and 18, Kenyon terrace, Birkenhead.

23rd Nov., 1848. *Brakell, Thomas, 7, Cook street, and 23, Richmond terrace, Everton.

30th Dec., 1854. Brent, Francis, Custom house, Southampton.

9th March, 1854. *Bright, Henry Arthur, B.A., Sandheys, West Derby. and 1, North John street.

Brooke, Henry, Forest hill, Northwich. 3rd May, 1849.

6th March, 1851. Brooke, Richard, jun., Norton Priory, Runcorn. 13th Sept., 1854. *Brounlie, Charles, 19, Tower chambers.

6th Jan., 1853. *Brown, Rev. Hugh Stowell, 118, Chatham street.

Brown, John, F.R.G.S., F.R.S., North Antiq. Copen-23rd Sept., 1854 hagen, 3, Newcastle place, Clerkenwell, London.

Brown, Robert, Preston. 11th Dec., 1856.

Brown, Thomas. 15th April, 1858.

23rd Nov., 1848. *Brown, William, Richmond buildings, Chapel street, and Richmond hall, VICE-PRESIDENT.

15th March, 1855. *Browne, G. Mansfield, 15, South hill, Park road.

11th Sept., 1854. *Burke, William, 160, Grove street.

17th Sept., 1854. Burnell, Rev. Samuel, M.A., Winwick, Warrington.

Burrell, John Stamp, Lancaster. Mayor La., 1853-4.

P. 15th Dec., 1853. *Buxton, David, F.R.S.L., Principal of the Liverpool Deaf and Dumb Institution, Oxford street.

Buxton, Edward, Principal of the Cambrian Deaf 2nd Nov., 1854. and Dumb Institution, Swansea.

C

23rd Nov., 1848. *Caine, Nathaniel, 12, Dutton street.

3rd Dec, 1857. *Calder, Rev. William, M.A., Holly road, Fairfield. 6th Dec., 1855. Calvert, F. Crace, F.C.S., M.R.A., Turin, Royal Institution, Manchester.

23rd Nov., 1848. *Campbell, Rev. Augustus, M.A., 131, Duke street, and The Vicarage, Childwall.

18th Dec., 1856. *Campbell, Captain William, R.L.A.

Carlisle, His Excellency, The Earl of, K.G., Castle 4th April, 1850. Howard, Yorkshire, and The Castle, Dublin.

5th March, 1857. *Carr, Thomas, Lower Bebbington, Birkenhead. 18th Dec., 1856. Cartwright, Samuel, Bushell place, Preston.

6th Dec., 1849. *Casson, William, 39, Parliament street, and 3, Great George square.

27th Sept., 1854. *Casey, George, Naylor street, and Walton. 26th Sept., 1854. *Cauty, Henry John, 31, Norton street

3rd Dec., 1857. *Chadburn, Charles Henry, 71, Lord street, and Egremont, Birkenhead.

15th April, 1858. *Chaloner, Thomas, 26, North John street, and College street, South.

14th Sept., 1854. *Chantrell, G. F, 150, Dale street.

Chapman, John, Hill End, Mottram-in-Longdendale. H. Sh. Chesh., 1855-6

Cheetham, John, Eastwood, Stalybridge. 21st May, 1857.

CHESHIRE, THE HIGH SHERIFF OF, VICE-PRESIDENT, ex officio.

Chester, The Lord Bishop of, The Palace, Chester. 2nd June, 1853.

23rd Nov., 1848. *Clare, John Leigh, 11, Exchange buildings, and Richmond terrace, Breck road.

Clarke, Rev. Joseph, M.A., R.D., Stretford, Manchester. 2nd Dec., 1858.

14th April, 1859. Clement, Leonard, Trinity terrace, Burnley.

21st May, 1857. *Clint, Francis A., 14, Dale street, and 2, Beech terrace.

Coates, Rev. W. H., West Kirby, Cheshire. 17th Dec., 1857.

10th Nov., 1854. Colston, Rev. John, Quarry bank, Wilmslow, Manchester.

24th May, 1855. Comber, Thomas.

23rd Nov., 1848. *Conway, John, Cable street.

15th April, 1858. *Cooke, A., 8, Temple court.

15th April, 1858. *Cooke, Robert, Liscard, Birkenhead.

P. 15th April, 1858. *Corey, Charles, 5, Slater street.

8th Sept 1854. *Cornish, Thomas, Revenue buildings.

18th Dec., 1856. Corser, Rev. Thomas, M.A., Stand, Manchester.

23rd Nov., 1848. Coulthart, John Ross, F.S.A., Scot., Croft house, Ashton-under-Lyne.

14th Dec., 1856. Cranage, Edward, Ph.D., Old hall, Wellington, Salop. 21st May, 1857. Cresswell, Right Hon. Sir Cresswell, 21, Prince's gate, London, and Fleming house, Old Brompton, Middlesex.

4th Dec., 1856. Crory, William G., Belfast.

6th Dec., 1849. *Crosfield, Henry, 4, Temple place, and Edge mount, Edge lane.

23rd Nov., 1848. Crosse, Thomas Bright, Shawe hill, Chorley.

2nd May, 1850. Crossley, James, F.S.A., President of the Chetham Society, Booth street, Piccadilly, Manchester. P. 23rd Nov., 1848. *Cust, Major-Gen. the Hon. Sir Edward, K.C.H.,

P. 23rd Nov., 1848. *Cust, Major-Gen. the Hon. Sir Edward, K.C.H., D.C.L., F.R.S., Leasowe Castle, Cheshire, Claremont, Surrey, and Hill street, London, President.

D

8th Dec., 1851. Dale, Rev. Peter Steele, M.A., Mytholmelodge, Hollin's green, Warrington.

8th Dec., 1851. *Dale, Robert N., Exchange court, Exchange street East.

P. 2nd Dec., 1851. *Danson, John Towne, F.S.S., Eidon chambers, South
John street, and the Grove, Woodchurch road,

Birkenhead.

23rd Sept., 1854. *Davies, Comenius, 134, Paddington, Edge hill.

6th March, 1856. Daw, Robert, F.B.S.E., &c., Custom house, Plymouth.

P. 23rd Nov., 1848. Dawes, Matthew, F.S.A., F.G.S., Westbrooke, Bolton. 23rd Nov., 1848. *Dawson, Henry, 30, Redcross street, and 14, St. James' road.

2nd May, 1850. *Dawson, Thomas, 20, Rodney street.

23rd Nov., 1848. Dearden, James, F.S.A., Rochdale Manor, Lancashire, and Upton house, Poole.

6th April, 1850. De Tabley, The Lord, Tabley hall, Cheshire.

23rd April, 1857. Devonshire, The Duke of, K.G., D.C.L., F.R.S., Chatsworth, Derbyshire, and Devonshire house, London.

7th May, 1851. *Dickinson, Joseph, M.A., M.D., F.R.S., F.L.S., M.R.I.A., 92, Bedford street South.

P. 20th Dec., 1855. Dobson, William, Chronicle office, Preston.

P. 7th March, 1853. *Dove, Percy M., F.S.S., F.I.A., Royal Insurance Office, 1, North John street, and 49, Hamilton square, Birkenhead.

4th Dec., 1856. *Driffield, Walter Wren, York buildings, Sweeting street, and Lime grove, Knowsley.

4th Nov., 1858. *Drysdale, Colin A., 7, Elm terrace, Fairfield.

23rd Nov., 1848. *Duarte, Ricardo Thomaz, 2, Royal Bank buildings.

13th Sept., 1854. *Duncan, Thomas, 18, West Derby street.

E

1st Jan., 1857. *Eaton, Francis James, Eaton villa, Richmond terrace, Breck road, and 7, Exchange chambers.

xiii MEMBERS.

9th Dec., 1852. Eckersley, Thomas, Wigan.

15th April, 1858. *Eden, James, Riversdale road, Garston.

P. 23rd Nov., 1848. Egerton, Sir Philip De Malpas Grey, Bart, M.P., F.R.S., F.G.S., Oulton park, Tarporley. 7th Jan., 1858.

Egerton, Hon. Wilbraham, M.P., Rostherne hall,

Knutsford.

Ellesmere, The Earl of, Worsley hall, Manchester, and 6th April, 1850. Bridgewater house, London.

23rd Nov., 1848. *Evans Edward, 52A, Hanover street.

4th Nov., 1858. *Evans, Edward Francis, Church road, Stanley. 15th Sept., 1854. *Evans, H. Sugden, F.C.S., 52A, Hanover street. 4th Dec., 1856. *Evans, Robert, Eldon Grove, Rock Ferry.

8th Nov., 1849. *Evans, Thomas Bickerton, 52A, Hanover street.

23rd Nov., 1848. *Ewart, Joseph Christopher, M.P., 64, Pall Mall, London, and New Brighton.

Ewart, William, M.P., 6, Cambridge square, Hyde 6th May, 1852. park, London.

\mathbf{F}

3rd Dec., 1857. Fairbairn, William, F.R.S., Manchester. 23rd Nov., 1848. Feilden, John, Mollington hall, Chester.

Ferguson, William, F.L.S. F.G.S., F.R.G.S., 62, Gres-11th Sept., 1854. ham house, Old Broad street, London, E.C.

23rd Nov., 1848. *Finlay, William, Collegiate Institution.
23rd Nov., 1848. *Fisher, William M., Ph.D., F.R.A.S., 36, Upper Parlia ment street.

15th April, 1858. *Foard, J. T., 34, Church street.

15th April, 1858. *Forrest, J. A., 58, Lime street, and 8, Cleveland street, Birkenhead.

5th Dec., 1850. *Forster, Wilson, New Ferry terrace, Rock Ferry, and 36, Dale street.

23rd Sept., 1854. *Forwood, T. B., The Hollies, Fairfield.

Fowler, C., Torquay. 15th April, 1858.

Frackelton, Rev. S. S., M.A., Ballynahinch, Ireland. Franks, Augustus Wollaston, M.A., F.S.A., British 7th May, 1857 15th Dec., 1853. Museum, London.

6th Jan., 1853. French, Gilbert James, Corr. Mem. S.A. Scot. Bolton. 7th Jan., 1858. *Frost, Meadows, 25, Albany, Oldhall street, and Chester.

G

14th Dec., 1848 *Gardner, Richard Cardwell, Colonial buildings, 34, Dale street, and Newsham house.

15th Dec, 1853. *Gardner, Rev. Thomas, M.A., Stanley.

3rd May, 1849. Garnett, Wm. Jas. M.P., Bleasdale tower, Garstang. 23rd Nov., 1848. *Gaskell, John Rooth, Exchange court, Exchange street East.

7th Feb., 1850. *Gath, Samuel, 45, Shaw street, Everton.

18th Dec., 1856. *Gerard, Henry, 10, Rumford place.

P. 20th Nov., 1856. *Gibson, A. Craig, Lower Bebbington, Birkenhead. 7th March, 1850. *Gill, Robert, 1, Chapel street, and Much Woolton. Gleadowe, Rev. R. W., M.A., Neston Vicarage, Cheshire. 3rd Dec., 1857.

15th April, 1858. *Glover, John, 26, Hanover street.

9th Dec., 1852. Graves, Samuel Robert, 13, Redcross street.

7th Feb., 1850. *Gray, John, 25, Strand street, and 16, St. Clement's terrace, Windsor.

Gray, Rev. R. H., M.A., Kirkby, Prescot. 21st Sept., 1854.

Gray, Thomas, Manager and Secretary, Unity Insurance Office, London. 14th Dec., 1848.

6th Feb., 1851. Gray, William, M.P., Wheatfield, Bolton.

2nd Dec., 1858. *Greame, Malcolm, Colonial buildings, Dale street. 16th Sept., 1854. *Green, Thomas, Richmond buildings, Chapel street. 23rd Nov., 1848. Greenall, Rev. Richard, M.A., Incumbent of Stretton,

R. D., Stretton, Warrington.

23rd Sept., 1854. Greene, John Stock Turner, Myddleton Hall, Warrington.

31st Aug., 1854. Grenside, Rev. William Bent, M.A., Melling Vicarage, Lancaster.

19th March, 1857. *Grimmer, W. Henry, Delta chambers, Cable street. Grosvenor, Rev. Francis, M.A., St. John's, Chester. 3rd Dec., 1857. 8th Nov., 1849. *Guyton, Joseph, 163, Falkner terrace, Upper Parliament street.

H

20th Sept., 1854. Hadwen, Joseph, Fairfield, near Manchester.

21st May, 1857. *Hall, Charlton R., 18, Dale street, and Liscard castle, Birkenhead.

Hall, John, Lancaster. Mayor La., 1852-53.

10th Dec., 1857. *Hancock, Thomas S., Birkenhead.

15th April, 1858. *Harding, J., Revenue buildings, and Ashfield house, Holt hill, Birkenhead. 30th Dec., 1854. *Hardman, J. W., B.A., South Hill place.

Hardwick, Charles, Preston. p. 6th March, 1856.

8th Nov., 1849. Harland, John, F.S A., Guardian Office, Manchester. P. 5th May, 1853. Harrison, William, Rock mount, St. John's, Isle of Man.

Harrison, William, F.G.S., &c., Galligreaves house, 12th Jan., 1854. Blackburn.

9th Dec., 1852. *Harrison, Henry Walter, 27, Castle street.

Harrowby, The Earl of, D.C.L., F.R.S., Sandon hall, 9th Feb., 1854. Staffordshire, and 39, Grovesnor square, London.

23rd April, 1857. Hartington, The Marquess of, M.P., Chatsworth, Derbyshire, and Devonshire house, London.

*Hartley John Bernard, 10, Bedford street South, and 10th Feb., 1853 Dock Yard.

P. 11th Oct., 1854. *Hartnup, J., F.R.A.S., Observatory. Hausburg, Leopold Promoli, London. 16th Dec., 1858.

23rd Nov., 1848. Hawkins, Edward, F.R.S., V.P.S.A., F.L.S., British Museum, London.

3rd May, 1849. *Hay. John, 15, Cable street, and Parkfield Cottage, Birkenhead.

27th Sept., 1854. *Healey, Samuel R., 48, Castle street, and Westbank' Woolton.

23rd Nov., 1848. *Heath, Edward, Orange court, Castle street, and St. Domingo grove, Everton, Vice-President.

Heginbottom, George, Albert terrace, Ashton-under-24th Oct., 1854. Lyne.

Henderson, Ebenezer, LL.D., Greenbank, St. Helen's. 11th May, 1854.

8th May, 1856. *Henderson, William, 41, Church street. 23rd Nov., 1848. *Herdman, William Gawin, West Villa, St. Domingo vale, Everton.

Heywood, James, F.R.S., F.S.A., F.G.S., 26, Kensing-23rd Nov., 1848. ton Palace gardens, London, W.

Heywood, Sir Benjamin, Bart., F.R.S., F.S.S., Clare-23rd Nov. 1848. mont, Manchester

P. 23rd Nov., 1848. Heywood, Thomas, F.S.A., Hope end, Ledbury, Herefordshire.

Hibbert, Joseph, Brookbank, Hyde, Cheshire. 3rd April, 1856.

4th Jan., 1849. *Hibbert, Thomas Dorning.

23rd Nov., 1848. *Higgin, Edward, Sweeting street.

P. 12th Sept., 1854. Higgins, Rev. H. H., M.A., Asylum, Rainhill.

Hill, Rev. John Wilbraham, M.A., Waverton, Cheshire. P. 23rd Nov., 1848. 21st Sept., 1854. *Hill, Samuel, 11, Lower Castle street.

Hinde, Rev. Edmund, M.A. 26th April, 1855.

8th Dec., 1851. Hinde, John Hodgson, 9, Saville row, Newcastle-on-Tyne, and Acton house, Felton, Northumberland.

Hindmarsh, Fred., F.G.S., F.R.G.S., Bucklersbury, 23rd Sept., 1854. London.

18th Dec., 1856. Holden, Thomas, Springfield, Bolton.

24th Sept., 1854. *Holt, William D., 23, Edge hill.

26th Sept., 1854. *Hore, Edmund Joseph, Moor lane, Crosby.

21st May, 1857. *Hornblower, Lewis, Clarendon buildings, South John street.

20th Sept., 1855. *Horner, Francis, 33, Everton road.

7th May, 1857. *Horner, W., 34, South Castle street, and Eldon house. Oxton.

23rd Nov., 1848. *Horsfall, Thomas Berry, M.P., Bellamore hall, Staffordshire.

14th April, 1853. *Houghton, $Richard\ H$, jun., Sandheys, Waterloo. 4th Dec., 1856. *Howell, Edward, 6, Church street.

8th Nov., 1849. *Howson, Rev. John Saul, M.A., Principal of the Collegiate Institution, VICE-PRESIDENT.

Howitt, Thomas, Lancaster. Mayor La., 1849-50.

27th Sept., 1854. *Hubback, Joseph, 27, Lower Castle street, & Aigburth.

P. 10th Dec., 1857. *Hughes, John R., 21, Clevedon street, Park road. 14th Sept., 1854. *Hughes, Joseph, 2, Upper Duke street, and 9, Brownlow hill.

16th Sept., 1854. *Hughes, J. B., 77, Mill street.

6th April, 1854.

Hughes, Thomas, 4, Paradise row, Chester. Hulton, William Adams, Hurst Grange, Preston. 8th Feb., 1852.

Mayor C., 1851-2. Humbertson, Phillip Stapleton, M.P., Chester. P. 23rd Nov., 1848. *Hume, Rev. Abraham, D.C.L., LL.D., F.S.A., Corr. Mem. S.A. Scot., 24, Clarence street, Everton, HON. SECRETARY.

Hume, Hamilton, Cooma, Yass, New South Wales. 21st May, 1857. Hunt, Richard, 9, Castle street, and San Domingo 6th Jan., 1859. vale, Breckfield road

9th Dec., 1852. *Hutchison, Robert, 12, Sweeting street, and 6, Canning street.

9th Oct , 1854. Ingham, Rev. Thomas Barker, M.A., Rainhill.

J

1st April, 1852. *JACOB, JOHN GIBBORN, 56, Church street. 23rd Nov., 1848. Jacson, Charles R., Barton lodge, Preston.

15th April, 1858. *Jago, J. R., Upper Huskisson street.

21st May, 1857. *Jeffery, James Redcliffe, 43, Church street, and 11, Lodge lane.

23rd Nov., 1854. *Jeffery, William R., 15, Deane street. 18th Sept., 1854. *Johnson, Henry, Rice lane, Walton. 23rd Nov., 1848. *Johnson, John H., 7, Church street. 11th Dec., 1856. Jones, W. Hope, Hooton, Cheshire.

23rd Nov., 1848. *Jones, Alfred, 17, Goree Piazzas.

23rd Sept., 1854. Jones, Edward, The Larches, Handsworth. 3rd May, 1849. *Jones, Morris Charles, 75, Shaw street.

2nd Dec., 1858. *Jones, Robert, 7, Batchelor street.

6th Dec., 1849. *Jones, Roger Lyon, 1, Great George square.

15th Sept., 1854. Jones, Thomas, B.A., Chetham Library, Manchester.

K

15th April, 1858. *Keith, W.

23rd Nov., 1848. *Kendall, Thomas, Green lane, Wavertree.

3rd May, 1849. Kendrick, James, M.D., Warrington.

Kershaw, James, M.P., Oaklands, Victoria park, Man-11th Dec., 1856. chester.

2nd Dec., 1858. Kirkes, Capt., D.L.O., Moorlands, Lancaster. 21st May, 1857. *Kitchen, Joseph, Oak house, West Derby.

L

15th Dec., 1853. *Lace, William Henry, 1, Union court, Castle street, and Beaconsfield, Woolton.

14th March, 1852. *Lambert, David Howe, 10, Exchange chambers, Tithebarn street, and Rock Park, Rock Ferry. LANCASHIRE, THE HIGH SHERIFF OF, VICE-PPESIDENT, ex-officio.

Langton, William, Manchester. 23rd Nov., 1848.

21st Sept., 1854. *Lea, James, Surveyor, Egremont, Cheshire.

2nd Dec., 1858. *Leah, Rev. R., B.A.

2nd Dec., 1858. *Lee, James, Berkeley street. 1st April, 1852. Lee, Rev. Thomas Faulkner, M.A., Royal Grammar School, Lancaster.

Legh, G. Cornwall, M.P., High Leigh, Warrington. Leigh, Major Egerton, The West hall, High Leigh, 23rd Nov., 1848. 10th Dec., 1857. Warrington.

15th April, 1858. *Leithead, H. F., Revenue buildings.

3rd Feb., 1859. *Leslie, George, 133, Upper Parliament street.

Lidderdale. W. 25th Sept., 1855.

Lilford, The Lord, Oundle, Northamptonshire, and 4th April, 1850. Grosvenor place, London.

4th March, 1858. Lindsay, The Lord, M.P., Haigh hall, Wigan. 23rd Nov., 1848. *Lingard, Alexander Rowsand, Eastham.

Mayor Liv., 1851-2. *Littledale, Thomas, 13, Exchange buildings, and Highfield house.

*LIVERPOOL, THE MAYOR OF, VICE-PRESIDENT, ex-officio. (William Preston, Esq.)

14th Dec, 1848. *Lloyd, John Buck, 54, Castle street, and Aigburth.

6th Jan., 1853. *Longton, John, Peter's place, Rumford street, and Breck road.

P. 23rd Nov., 1848. Lord, Lieut. William, R.N., 8, North parade, Bath. 6th Dec., 1849. Lyon, Thomas, Appleton hall, Warrington.

\mathbf{M}

21st Sept, 1854. *MacIlveen, Alexander, Principal of the Liverpool Institute, Sandon terrace.

15th April, 1858. *McInnes, J., 21, Neptune street.

P. 3rd March, 1853. *MACINTYRE, PETER, M.D., 128, Duke street.

27th Sept., 1854. *Macfie, Robert Andrew, 30, Moorfields, and Ashfield hall, Neston.

M'Nicoll, David Hudson, M.D., Southport. 21st May, 1857.

23rd Nov., 1848. *M'Quie, Peter Robinson, 14, Water street, and Low hill.

5th May, 1853. *Macrae, John Wrigley, Edge lane, and 22, Hackin's hey.

6th Dec., 1849. *M'Viccar, Duncan, Abercromby terrace, and 7, Exchange buildings.

Manchester, The Lord Bishop of, F.R.S., F.G.S., Maul-3rd Jan., 1849. deth hall, Manchester.

Markland, James Heywood, D.C.L., F.R.S., F.S.A., 23rd Nov., 1848. Bath.

23rd Nov., 1848. *Marsden, George, Vernon Priory, Edge hill.

5th June, 1841. Marsh, John Fitchett, Fairfield house, Warrington.

1st Jan., 1857. Marshall, W., Penwortham hall, Preston.

9th March, 1854. *Mason, William Ithell, 14, Lower Hope place.

23rd Nov., 1848. *Mather, Daniel, 70, Mount pleasant.

15th April, 1858. *Mawdsley, H., Southport. P. 23rd Nov. 1848. *Мауев, Joseph, F.S.A., M.R. Asiat. S., F.E.S. F.R.S. North. Antiq. Copenhagen, Associé étranger de la

Société Impériale des Antiquaires de France, Hon. Mem. SS. Antiq., Normandie, l'Ouest, and la Morinie, de la Sociétè d'Emulation d'Abbeville, &c., 68, Lord street, Hon. Curator.

17th Feb., 1850. Mayer, Samuel, Newcastle-under-Lyne.

10th Feb., 1859. Meaden, Henry Peter, Burnley.

24th May, 1855. Melling, Thomas, C.É., Rainhill. 15th April, 1858. *Mercer, Nathan, F.C.S., 7, Church street.

15th April, 1858. *Mercier, J. D., 34, Church street. 10th Feb., 1859. *Mewburn, John, Union Bank

6th Dec., 1849. Middleton, Captain James, F.S.A. 31st Dec., 1854. *Milner, William, 322, Upper Parliament street, and Phœnix Safe Works, Windsor.

Mayor Liv., 1848-9. *Moore, John Bramley, Hon. Mem. Archæological Association, Carioca Lodge, Aigburth, and Orange court, Castle street.

3rd Dec., 1857. *Moore, Rev. Richard R., B.A., 28, Rupert lane, Everton.

8th Nov., 1849. *Moore, Rev. Thomas, M.A., 65, Oxford street, P. LIBRARIAN.

18th Dec., 1856. Moseley, Thomas Beeby. 15th April, 1858. *Moss, J. B., 34, West Derby street.

P. 23rd Nov., 1848. *Moss Rev. John James, M.A., Upton, Cheshire.

7th March, 1850. *Mott, Albert J., 21, South Castle street, and Holt Hill, Birkenhead.

18th Sept., 1854. *Mott, C. G.

3rd Dec., 1857. *Moult, William, 21, Leigh street, and Knowsley.

21st May, 1857. *Mozley, Charles, 125, Mount pleasant.

19th Sept., 1854. *Musker, Roger Melling, Walton.

11th Dec., 1856. Myres, John James, Bank parade, Preston.

N

H.S. Ches., 1857. Naylor, Richard, Hooton, Cheshire.

23rd Nov., 1848. *Neill, Hugh, F.R.A S., 6, Abercromby square. 15th April, 1858. *Newlands, J., Public Offices, Cornwallis street.

p. 6th Dec., 1855. *Newton, John, 13, West Derby street. 23rd Nov., 1848. Nicholson, James, F.S.A., Thelwall hall, Warrington.

29th Sept., 1854. *Nottingham, John, M.D., 18, Roscommon street.

Oates, Captain W. C., Cavendish place, Bath. 2nd Jan., 1851.

6th Dec., 1849. Ormerod, George, D.C.L., F.R.S., F.S.A., F.G.S., Sed-P. bury Park, Chepstow.

6th Feb., 1851. Osborne, John James, Macclesfield. 3rd Jan., 1850. *Overend, James, 55, Hope street.

3rd Dec., 1857. Oxley, Frederick, 68, Goswell street, London, E.C.

23rd Nov., 1848. *Paris, Thomas Jeremiah, 68, Lord street.

3rd Jan., 1850. *Parker, Charles Stewart, Bank chambers, Cook street.

18th Dec., 1856. Parker, Robert Townley, Cuerden hall, Preston.
7th March, 1850. Pattern, John Wilson, M.P., Bank hall, Warrington.
2nd Nov., 1854. Patterson, Andrew, Principal of the Deaf and Dumb Institution, Manchester.

9th Oct., 1854. *Peacock, John, 2, Chapel street.

6th Dec., 1849. *Pearce, George Massie, Hackin's hey, and Ormskirk.

23rd Nov., 1848. Pedder, Edward, Ashton Park, Preston.

Pedder, Henry Newsham, Preston. 11th Dec., 1856.

Pedder, Richard, Winckley square, Preston. 23rd Nov., 1848.

Perrin, Joseph, The Crescent, Levenshulme, Man-8th Dec., 1851. chester.

6th Jan., 1849. *Picton, James Allanson, F.S.A., Queen's Insurance buildings, Dale street.

Pierpoint, Benjamin, Warrington. 3rd May, 1849.

23rd Nov., 1848. Pilkington, James, M.P., Park place, Blackburn. Platt, Robert, Dean Water, Handforth, Manchester. 10th Feb., 1853. 23rd Nov., 1848. *Poggi, Rev. Dominica Joseph, D.D., New Brighton College, Birkenhead.

6th Dec., 1849. *Poole, John, 23, Oxford street.

29th Dec., 1854. Porter, Rev. Jas., M.A., St. Peter's College, Cambridge.

1st Sept., 1854. Preston, Rev. G., M.A., Whalley.

12th March, 1857. *Preston Geo. Theo. Robert, Rock house, West Derby road, and 13, Vernon street, Dale street.

6th Dec., 1849. *Preston, William, 13, Vernon street, and Rock house, West Derby road, Vice-President, ex officio.

Quekett, Rev. W., M.A., Rectory, Warrington. 18th Dec., 1856.

R

23rd Nov., 1848. Raines, Rev. Canon, M.A., F.S.A., Milnrow Parsonage. Rochdale.

Ralstone, J., 195½, Argyle street, Glasgow. 15th April, 1858.

P. 18th Sept., 1854. *Ramsay, Rev. Arthur, M.A., Highfields, Eaton road, West Derby.

23rd Sept., 1854. *Rathbone, William, 24, Water street, and Greenbank, Wavertree.

Rawlinson, Robert, C.E., F.G.S., 34, Parliament street, 15th March, 1849. Westminster.

13th Sept., 1854. *Raynes, James Trevelyan, 37, Oldhall street, and Rock park, Rock ferry.

23rd Nov., 1848. *Reay, James, Guardian office, Commerce court, Lord street.

23rd Nov., 1848. *Reay, Thomas, 87, Church street. 29th Dec., 1854. Rees, William, Old Trafford, Manchester.

7th March, 1850. *Richardson, S.

14th Dec., 1848. *Robin, John, Chapel walks, South Castle street, and Grove hill, West Kirby, Birkenhead.

Robin, Rev. P. R., M.A., Barnston, Birkenhead. 20th Dec., 1855.

23rd Nov., 1848. *Robinson, Charles Backhouse, 12, Myrtle street, and Matilda grove, Aigburth.

11th Dec., 1856. *Robinson, Joseph, Tue brook, West Derby.

P. 3rd May, 1849. Robson, John, M.D., Warrington.

3rd Jan., 1850. *Ronald, Robert Wilson, 19, Dale street.

Rooke, Rev. W. J. E., Tunstal Vicarage, Kirkby 15th April, 1858. Lonsdale.

Rowlandson, W., Kendal. 15th April, 1858.

14th April, 1853. *Ryder, Thos. Bromfield, 2, Elliott st., Clayton square.

Rylands, Peter, Bewsey house, Warrington. Rylands, Thomas Glazebrook, Warrington. 25th Sept., 1854. P. 13th Dec., 1854.

S

6th Dec., 1855. *Sandbach, W. R., Bank buildings, Cook street, and The Cottage, Aigburth.

Sansom, Rev. John, B. A., Buslingthorpe Rectory, P. 19th Sept, 1854. Market Rasen.

7th Sept., 1851. *Sansom, Thomas, A.L.S., F.B.S.E., 33, Everton road. 23rd Nov., 1848. *Scholfield, Henry D., M.D., 14, Hamilton square, Birkenhead.

Sharp, John, The Hermitage, Lancaster. 8th Jan., 1852. Sharp, William, 102, Piccadilly, London. 2nd June, 1853.

Sharpe Edmund, M.A., Coedfa, Llanrwst, N. Wales. 23rd Nov., 1848.

1st Dec., 1855. *Shawe, J. R., Arrowe hall, Birkenhead. 7th Feb., 1850. *Sherlock, Cornelius, 22, King street.

3rd Dec., 1857. *Shimmin, Hugh, Melbourne buildings, 21, North John P. street.

11th Feb., 1858. *Shute, Arthur, 21, Water street.

3rd May, 1849.

Shute, Robert, 2, Baring crescent, Exeter.
Simpson, Rev. Samuel, M.A., St. Thomas' Parsonage, 23rd Nov., 1848. Douglas, Isle of Man.

Skaife, Thos., Vanbrugh house, Blackheath, London. 23rd Nov., 1848.

Slade, Rev. J., M.A. 10th Dec., 1857.

2nd May, 1850. *Smith, James, Brunswick dock, and Seaforth. 30th Dec., 1854. *Smith, John Peter George.

Smith, John Langley, near Macclesfield. 16th Sept., 1854. 6th Jan. 1853. *Smith, William Penn, 26, Hanover street.

23rd Nov., 1848. *Snowball, J. G., 10, Castle street, and 11, Upper Canning street.

6th Nov., 1856. Sodor and Man, The Lord Bishop of, Bishop's court, Isle of Man.

Stainer, William, Pavilion, Old Trafford, Manchester. 2nd Nov., 1854.

Staniforth, Rev. Thomas, Storrs, Windermere. 3rd Jan., 1856.

13th Dec., 1855. Steiner, F., Hyndburn, Accrington.

1st Jan., 1856. *Steains, James, 35, North John street, and 56, Upper Kensington.

15th April, 1858. *Stevens, J., 166, Park road.

30th Dec., 1854 *Stewart, James Gordon, 3, West Derby street. 23rd Nov., 1848. *Stewart Rev. John, M.A., Sandown park, West Derby. 5th June, 1850. *Stock, John, 7, Exchange buildings, and Westdale, Wavertree.

20th Nov., 1856. *Stroud, William Lawrence, 1, Upper Woodlands, Clifton Park, Birkenhead.

8th Nov, 1849. *Stuart, William, 1, Rumford place, and Springfield House, Knotty Ash.

Stubs, Joseph, Park place, Frodsham. 5th June, 1851.

25th Sept., 1854. *Sumners, Henry, Colquitt street. 21st Sept., 1851. *Surr, John, 163, Bridge street, Birkenhead.

23rd Nov., 1848. *Sutton, Hugh Gaskell, Exchange court, Exchange street East, and Woodend, Aigburth.

4th March, 1852. *Sykes, James, Colonial buildings, 34, Dale street, and Breck house, Poulton-le-fylde.

16th Dec., 1858. *Tattersall, Rev. A., M.A., Walton-on-the-hill.

Taylor, J. F., Cockermouth. 15th April, 1858.

P. 23rd Nov., 1848. *Thom, Rev. David, D.D., Ph.D., 28, Erskine street.

15th April, 1858. *Thomas, George, 31, Lord street.

18th Feb., 1858. *Thompson, Henry, 151, Upper Parliament street, and 11, North John street.

Thornber, Rev. William, B.A., Blackpool. 8th Dec., 1851.

13th Sept., 1854. *Thornely, Samuel, 24, Clarence street. 8th Dec., 1851. *Tinne, John A., F.R.G.S., 13, Bank chambers, Cook street, and Briarley, Aighurth.

Threlfall, Richard, Avenham terrace, Preston. 11th Dec., 1856. Mayor Li. 1854-55. *Tobin, James Aspinall, South John street. Tobin Sir Thomas, F S A., Ballincollig, Cork. 14th Dec., 1848.

8th Jan., 1852. *Torr, John, 15, Exchange buildings, and Eastham.

H. S. Lanc., 1857. Towneley, Charles, Towneley hall, Burnley.

- P. 2nd April, 1857. *Towson, John Thomas, F.R.G.S., 47, Upper Parliament street, and Sailor's Home.
 - 5th Dec., 1850. *Tucker, Robert, 11, North view, Edge hill.
- P. 23rd Nov., 1848. *Tudor, Richard A., M.R.C.S., Church view, Bootle. 14th April, 1853. *Turner, Charles, 4, Lancelot's hey, and Dingle head.
 - 27th Sept., 1854. *Turner, John Hayward, 23, Abercromby square.
 - 6th Dec., 1849. Turner, Edward, High street, Newcastle, Staffordshire.
 - 16th Dec., 1858. *Tuton, E. S., 48, Lime street.

8th March, 1854. *Underwood, Rev. Charles W., M.A., Vice-Principal, Collegiate Institution.

23rd Nov., 1848. *Varty, Thomas, Walpole villa, Fairfield, and Lime street.

14th April, 1853. *Vose, James, M.D., 5, Gambier terrace, Hope street.

W

- Myr. C. 1838-39, 48-49. Walker, Sir Edward Samuel, Berry hill, Mansfield,
 - 11th Dec., 1856. Walmsley, Thomas, Preston.
 - 6th March, 1851. Warburton, Rowland Eyles Egerton, Arley hall, Cheshire.
 - Ward, John Angus, Hooton lodge, Cheshire. 21st May, 1857.
 - Wardell, William, Abbotsfield, Chester. 10th Dec., 1857.

 - 6th June, 1850. *Waterhouse, Sebastian, 37, Catharine street. 26th Sept., 1854. *Watling, J. W. H., Wavertree.
 - Watt, Richard, Speke hall. 5th Feb., 1857.
 - 17th Dec., 1857. Watts, Sir James, Manchester.
 - Way, Albert, M.A., F.S.A., Wonham manor, Reigate, 2nd May, 1850. Surrey.
 - 1st Feb., 1849. *Webster, George, 6, York buildings, Dale street, and Mosley hill, Aigburth.
 - Welton, Thos. A., F.S.S., 147, Fenchurch street, London. 3rd Jan., 1856. Р.
 - 1st Feb., 1849. *Whitehead, James Wright, Orange court, Castle street, and 15, Duke street, Edge hill.
 - 2nd June, 1853. *Whitley, George, 5, Clayton square, and Bromborough.
 - 9th Oct., 1854. Whitley, Rev. John, M.A., Newton rectory, Warrington.
 - 6th June, 1850. Whitley, Rev. William, B.A., Catsclough, Winsford, Cheshire.
 - Wilkinson, Thomas Turner, F.R.A.S., Corr. Mem. Lit. P. 30th Nov., 1854. and Phil. Soc. Manch., Burnley.
 - 8th Jan., 1852. *Willoughby, Edward G., Marine cottage, Tranmere.
 - Wilson, G. F., F.R.S., Belmont, Vauxhall, London. 6th Dec., 1855.
 - 23rd Nov., 1848. Wood, Venerable Isaac, M.A., Archdeacon of Chester, Newton, near Middlewich.
 - Wood, Isaac Moreton, M.A., Newton, near Middlewich. 23rd Nov., 1848.
 - Wood, Samuel, F.S.A., The Abbey, Shrewsbury. 9th Feb., 1854.
 - 10th Feb., 1853. *Wood, Thomas, B.A., Blue Coat Hospital.
 - 7th May, 1851. *Woodhouse, John George, 117, Henry street.
 - 30th Dec., 1854. Worthy, George Smith, Bristol.

HONORARY MEMBERS.

- 6th Feb., 1851. Akerman, John Yonge, Sec. S.A.; Hon. M.R.S.L.; F.S.A. Newcastle; F.R.S. of Northern Antiquaries; Corr. Mem. SS. Antiq. Scot. France, Russia, Switzerland, Rome; Hon. Mem. Roy. Acad., Stockholm; Somerset House, London.
- 27th Sept., 1854. Babington, Charles Cardale, M.A., F.R.S., F.L.S., Sec. C.P.S, St. John's College, Cambridge.
- P. 13th Nov., 1851, Bell, William, Ph.D., 31, Burton street, Burton crescent, London.
 - 6th Feb., 1851. Blaauw, William Henry, M.A., F.S.A., Beechland, Uckfield.
 - 6th Feb., 1851. Boileau, Sir John P., Bart., F.R.S., F.S.A., Ketteringham hall, Wyndham, Norfolk, and 20, Upper Brook street, Grosvenor square, London.
 - 27th Sept., 1854. Brewster, Sir David, K.H., D.C.L., LL.D, F.R.SS.L., and E., Hon. M.R.I.A., St. Andrews, N.B., and Allerby, Roxburghshire.
 - 6th Feb., 1851. Charlton, Edward, M.D., F.S.A. Newc., 7, Eldon square, Newcastle-on-Tyne.
- P. 1st Feb., 1855. Clarke, Joseph, F.S.A., Saffron Walden, Essex. 19th May, 1859. Cochet, M. L' Abbé, Inspector of Antiquities and
 - 19th May, 1859. Cochet, M. L'Abbé, Inspector of Antiquities and Monuments in Normandy, Dieppe.
 - 8th Jan., 1852. De Perthes, J. Boucher de Crevecœur, Chevalier des ordres de Malte et de la Légion d'honneur, membre de diverses Sociétés Savantes, Abbeville.
 - 6th Feb., 1851. Duncan, Philip B., D.C.L., Oxford.
 - 27th Sept., 1854. Gray, John Edward, Ph.D., F.R.S., F.L.S., V.P.Z.S., Pres. Entom. Soc., &c., British Museum, London.
- P. 27th Sept., 1854. Latham, R. Gordon, M.D., F.R.S., Greenford, Middlesex.
 - 6th Dec., 1849. Londesborough, The Lord, K.C.H., F.R.S., F.S.A., Grimston, Tadcaster, and 8, Carlton House terrace, London.
 - 9th Dec., 1852. MacAdam, Robert, 18, College square, Belfast.
 27th Sept., 1854. Murchison, Sir Roderick Impey, G.C.St.S., M.A.,
 D.C.L., F.R.S., V.P.L.S., F.G.S., V P.R.Geogr.S.,
 Hon. M.R.I.A., Director General of the Geological
 Survey of Great Britain and Ireland; Trust. Brit.
 Mus.; Hon. Mem. Acadd. St. Petersburg, Berlin,
 Copenhagen; Corr. Mem. Inst. France, &c., 16,
 - Belgrave square, London. 27th Sept., 1854. Owen, Richard, M.D., LL.D., F.R.S., F.L.S., F.G.S., British Museum, London.
- P. 7th May, 1851. Pidgeon, Henry Clarke, 3, Westbourne villas, Harrow road, London.
 - 27th Sept., 1854. Phillips, John, M.A., LL.D., F.R.S., Pres. Geol. Soc., Reader in Geology, Oxford.
 - Reader in Geology, Oxford.

 27th Sept., 1854. Rosse, The Earl of, K.P., D.C L., F.R.S., F.S.A., F.R.A.S., F.G.S., Birr Castle, Parsonstown, Ireland.

- 27th Sept., 1854. Sabine, Major-General Edward, R.A., D.C.L., Treas. and V.P.R.S., F.R.A.S., 13, Ashley place, Victoria street, London, and Woolwich.
- Sedgwick, Rev. Adam, M.A., F.R.S., F.G S., F.R.A.S., 27th Sept., 1854. Hon. M.R I.A., Woodwardian Professor, Trinity College, Cambridge.
- Smith, Charles Roach, F.S.A., Member of the Roy. Soc. North. Antiq. Copenhagen; Hon. Mem. SS. 6th Feb., 1851. Antiq. France, Normandy, Scotland, Spain, Newcastle, the Morinie, Abbeville, Picardy, Wiesbaden, Luxemburg, Treves, Touraine, &c., Temple place,
 - Strood, Kent. Turnbull, William B., F.S.A. Scot., 3, Stone buildings, 6th Feb., 1851. Lincoln's Inn, London.
 - Whewell, Rev. William, D.D., F.R.S., F.G.S., F.R.A S., 27th Sept., 1854. Hon. M.R.I.A., Corr. Member of the Institute of France, Master of Trinity College, Cambridge.
 - 6th Feb., 1851. Williams, Rev. John, M.A., Llanymowddwy, Dinas
 - Mowddwy, Shrewsbury.
 Willis, Rev. Robert, M.A., F.R.S., Jacksonian Professor, Cambridge, and 23, York terrace, Regent's 6th Feb., 1851. park, London
- Wright, Thomas, M.A., F.S.A., Hon. M.R.S.L., P. 27th Sept., 1854. Member of the Institute of France; of the Roy. Soc. Northern Antiqs. Copenhagen; Hon. Mem. of the Soc. of Antiquaries of France; Corresp. Mem. Soc. Antiq. Normandy; of Soc. Antiqs. Scotland; &c., 14, Sydney street, Brompton, London.





Signalures af Throughou Tuburs.

John Taylor Joseph Pries Key. Howler Gilbert Wahefuld John Aikin M. Enfield Testedelon Mlayton

TRANSACTIONS.

A HISTORICAL SKETCH OF WARRINGTON ACADEMY.

By Henry A. Bright, B.A.

(READ 11TH NOVEMBER, 1858.)

A few years ago a parcel of papers—some letters, some memoranda—which had belonged to the Rev. J. Seddon, the founder of the Warrington Academy, was rescued from the hands of a Liverpool cheesemonger, who was using them for the ordinary purposes of his shop. Among these papers were several letters of Priestley, of Kippis, and of Aikin. There were others of men of lesser note, which were, however, not without an interest, inasmuch as they threw a new light on the history of the Warrington Academy.

From these papers, then, at the request of the Council of the Historic Society, I have compiled this brief sketch. In addition to the Seddon papers I have made use of other materials from the following sources:—

- I.—A volume of unpublished papers concerning the Academy, collected by Serjeant Heywood, who is not unknown as the author of the "Vindi-" cation of Fox's History."
- II.—A series of articles in the "Monthly Repository" on the Academy, by the Rev. W. Turner.
- III.—The Lives of Dr. Priestley, Dr. Aikin, and Gilbert Wakefield, and Dr. Kendrick's "Warrington Worthies."*
 - IV.—Some interesting manuscript lectures of Mr. Marsh of Warrington.
- V.—Information for which I am indebted to Mr. Beamont of Warrington, and Miss Lucy Aikin.

^{*} It is owing to the great kindness of Dr. Kendrick that this paper is illustrated with the engravings of the Academy and the Tutors' houses.

VI.—The original minute books of the Academy, which were lent to me by the Secretary of Manchester New College, the Rev. R. Brook Aspland.

If in the arrangement of this ample material I fail in exciting your interest, the fault, I feel, will rest with me. The history of the Warrington Academy must in itself always have a value for the literary man, for the theologian, and for him to whom the history of Lancashire has any interest. At Warrington Academy were collected some of the noblest literati of their day. Here the free thought of the English Presbyterians first began to crystallize into the Unitarian theology, which they have since maintained. Here for a time was the centre of the liberal politics, and the literary taste of the entire county. Am I exaggerating the importance of this Academy? I do not think so. But if so,—something, perhaps, may be excused to one who is descended from some of the earliest supporters of the Academy, and who owes many of his own highest views to the teaching, which his family first learnt from those old Warrington tutors.

In the year 1753 the failure or decay of the several Academies belonging to the English Presbyterian body at Findern and Kendal, and elsewhere, caused no inconsiderable anxiety to the more thoughtful and earnest among the liberal dissenters. Where were they to look for their future supply of ministers? Where could those ministers be educated in a theology unshackled by creed and doctrine? On none did these questions press with greater weight than on John Seddon, the young minister at Warrington. The idea of founding a new Academy took possession of him, and the idea once formed was never dropped until it had been carried out in action. Well might the Rev. Philip Holland in after years bear witness to "the concern which he had ever expressed for its support, "honour, success; the indefatigable pains which he took for this purpose: "the indifference which he shewed to fame or censure, to good or evil "report, so that he might serve the general designs of the institution." Lying before me is a large mass of Mr. Seddon's correspondence relative to the foundation of the Academy. How he worked, and wrote, and explained, and begged! He is never discouraged, though his discouragements are innumerable. He is never down-hearted, though his friends are always suggesting difficulties, and prophesying evil. Mr. Daniel Bayley

of Manchester thinks the design too large, and "should not London lay "the foundation, and we be only supplemental," and "is not so populous, "so pleasurable, so divided, and so dear a place as Manchester very unfit "for a seat of the Muses." Mr. Peter Touchet, of Manchester, thinks that Warrington should not be mentioned as the site of the Academy. Mr. John Mort, of Chowbent,—to whom Mrs. Barbauld addressed some lines beginning "Happy old man!" and whom she characterises as "O rude of speech, yet rich in genuine worth,"—this Mr. Mort is afraid "our richer neighbours will not be over zealous in the affair." Mr. John Wilson, of Rivington, will subscribe the munificent sum of five guineas if necessary, but thinks it would be hardly proper to subscribe before Lord Willoughby. Lord Willoughby of Parham, who afterwards became first President of the Academy, was, I suppose, the most important personage among the English Presbyterians of this date, and it is amus ing enough to notice how respectfully, (with one exception,) all Mr. Seddon's correspondents name him. "Pray my duty to Lord Willoughby, "if you think proper," writes the Rev. R. Godwin, of Gateacre. The eminent Dr. John Taylor, of Norwich, rejoices that "Lord Willoughby and "so many of Harry Hoghton's family have came into the subscription."

But before Lord Willoughby had entered into the scheme—which important date appears to be October 11th, 1754—a long circular had been sent round in July of the same year, signed by Daniel Bayley, John Lees, afterwards Sir Caryll Worsley, and seven others. This circular gives as the subscriptions already promised—

| Manchester | | | | | | | £94 | 10 | 0 |
|-------------|---|---|---|---|---|---|-----|----|---|
| Liverpool . | ٠ | • | • | | | | 46 | 4 | 0 |
| Birmingham | • | | | • | • | | 44 | 12 | 6 |
| Warrington | ٠ | | | ٠ | ٠ | | 31 | 15 | 6 |
| | | | | | | | | | |
| | | | | | | £ | 217 | 2 | 0 |

In the April of the next year the subscription mounts up. Lord Willoughby will give his ten guineas, Sir H. Hoghton's family "will "encourage us," says Mr. Seddon, "so that our present subscription "amounts to about £300 per annum." Dr. Taylor of Norwich promises subscriptions from his congregation, and Bristol and Exeter will probably aid the cause. Leeds, however, looks coldly upon the plan, and thinks "the Glasgow education" sufficient for their wants. Liverpool, too, as

may be guessed from the smallness of her contribution, is somewhat lukewarm. The fact was, that Liverpool regarded the whole affair as a Manchester scheme, and with that pleasing spirit of jealous rivalry which has always existed between the two towns, the Liverpool men insisted on the site of the Academy being Ormskirk instead of Warrington. And so a paper was drawn up at Liverpool, with seven excellent reasons for preferring Ormskirk. These reasons, however, do not bring conviction to the supporters of Warrington, and the Rev. R. Godwin, in a letter to Mr. Seddon, observes that "some of them are false, others dubious, and all, "whether true or not, trifling and impertinent." And then comes a rejoinder from "the gentlemen in Manchester," and then a printed letter from Sam. Angier, Benj. Heywood, Joseph Brooks, Wm. Lightbody, and other of "the gentlemen in Liverpool," and then "Remarks on a letter "from the gentlemen in Manchester to the gentlemen in Liverpool, sub-"scribers to the intended Academy. April 27th, 1757." This last letter shews, I regret to say, that "the gentlemen in Liverpool" finding that they are not powerful enough to carry their favourite, Ormskirk, lose their temper most completely. Every fourth word in this last letter is italicised; and after much cutting sarcasm they indignantly demand of their opponents, "are not such gentlemen more properly the authors of contention "and division?"

The 30th of June, 1757, was now approaching, when the first general meeting of the supporters of the Academy was to be held. A stormy meeting was evidently expected, and it was more than probable that the whole scheme might founder just as it was getting fairly under weigh. Some anonymous friend of the Academy thinks it well before the meeting to distribute some printed "Rules proposed to be observed for the better "regulation of proceedings in the affairs of the Academy now depending." There are nine of these rules, referring chiefly to Proxies, and the necessity of a good understanding between the Trustees, and Rule VI. runs thus:— "To remove all ground of emulation between Liverpool and Manchester "(where it is mostly feared) in the choice of persons to carry on the Aca-"demy, let Manchester have the nomination of one, and Liverpool another,

^{*} In another letter, however, this same Mr. Godwin admits that "several are daily "complaining that the people of Manchester are for managing everything relative to the "Academy, independent of others; that Liverpool is ignorant of all their measures, and "has not once been consulted upon any one occasion."

"&c.;" that "&c." expresses a good deal, and probably means (for these rules evidently emanate from Liverpool) that Liverpool may fix on the site of the Academy, and that Manchester, perhaps, may then be allowed to provide an architect.

There are two thin old vellum-covered volumes, which contain the Minutes of the Warrington Academy. The second volume is only about one-half filled, for the hopes of the Trustees were but partially realized, and the Academy was closed in 1786, after a useful but precarious existence of nine-and-twenty years. It was on the 30th June, 1757, (as we find from these minutes) that the first meeting of Trustees was held, and Warrington was after all the place of meeting. Twenty-five Trustees were present. Two were from Birmingham, and eight from Manchester. Ministers of Gateacre and Bolton, Mr. Mort of Chowbent, and from Liverpool, Arthur and Benjamin Heywood, Dr. Angier, Richard Savage, Thomas Wharton, Thomas Bentley and James Percival were also present. Warrington itself was represented by the indefatigable Mr. Seddon, Mr. Elias Bent (who now lies buried in the Cairo Street Chapel grave-yard) and three other laymen. After reading the "proposals for carrying into execu-"tion a plan for the liberal education of youth," a long list of resolutions were proposed and carried. Mr. Seddon, in whose handwriting the early minutes seem to be, appears, as well he might be, astonished at the unanimity which after all the meeting showed, and writes, "resolutions in all "which the whole assembly was perfectly unanimous." Perhaps, the gentlemen of the rival towns were tired of quarrelling; perhaps, they adopted the suggestion of dividing between them the patronage and appointments; perhaps, and most probably, the more important resolutions were modified at the time, so as to meet the wishes of all. Be this as it may, Lord Willoughby is appointed President, Mr. John Lees of Manchester, Vice-President, Mr. Arthur Heywood of Liverpool, Treasurer, and Mr. Seddon, Secretary. Local Treasurers in the large towns are then appointed. The subscription list is ascertained to amount to £469 5s., and the benefactions to £148 11s. Four Tutors are recognised as necessary to render the design complete, but at present it is more prudent to appoint three only. Dr. Taylor of Norwich is to be Tutor in Divinity; Mr. Holt of Kirkdale, to be Tutor in Natural Philosophy; and Mr. Dyer of London, to be Tutor in Languages and Polite Literature, and for the present in Moral Philosophy. Each of these tutors is to have £100 per annum from

the fund, and "with respect to dwelling-houses, are to be at their own "expenses." Poor students are exempted from payment of fees, but richer ones must pay £2 2s. yearly to each of the tutors. And then comes the resolution over which Manchester and Liverpool had already quarrelled in anticipation, and which was evidently drawn up with the most diplomatic care:—"That for the present, and as a temporary settlement, Warrington "is the most convenient situation for the Academy, and that Messrs. Hart, "Bent, Leigh, Turner and Seddon are hereby empowered to contract for "houses immediately." A managing committee is then appointed, certain regulations respecting their functions are passed, and it is declared that a general meeting of trustees must be held every year. And thus the new Academy was started.

On the 20th October, in this same year, a letter is sent by the Committee to the various subscribers. Houses suitable for the Academy have been engaged "for seven years only." Dr. Taylor and Mr. Holt are already settled at Warrington, and (as for some unexplained reason Mr. Dyer is not settled) they have promised to divide between them the Languages and Polite Literature, and Moral Philosophy. The *Tutors will take boarders into their houses at £15 per annum for those who had two months' vacation, and £18 per annum for those who had no vacation; these terms, however, are exclusive of "tea, washing, fire and candles." Three students have already arrived.

The choice of a third tutor was matter of difficulty. Dr. Taylor recommended Mr. Scott of Norwich; Dr. Benson of London suggested the Rev. Mr. Priestley of Needham Market; others think Mr. Aikin of Kibworth would be the best man, and the Rev. Mr. Jenkins of Montgomeryshire has his supporters. At last the choice falls on Mr. (afterwards Dr.) Aikin, and a long, long letter from Mr. Seddon, dated March 11th, 1758, and preserved in the minutes of the Academy, informs him of the fact. I will not trouble you by the enumeration of Mr. Aikin's virtues, and the names of the trustees who recommended him, which take up a great part of this letter. One passage, however, is curious enough, as showing what travelling in England was just one hundred years ago.

^{* &}quot;They knew better than to usurp the title of *Professors*, as so many do in these "days from ignorance or presumption; only a chartered body can give Professorships."—*Letter from Miss Aikin*.

"Mr. Holland has given us some reason to hope yt you will come over to Warrington in the Easter week, in order to take a view of yr future situation; if so give me leave to recommend ye following plan. I'll suppose you set out from Kibworth on Sunday afternoon; as you intend travelling in post chaises, you'l easily reach Loughborough or perhaps Derby that night; ye next night you may come to Offerton wh is about a mile short of Stockport, where I am with Mrs. Seddon, & will be ready to receive you; and wait upon you to Warrington: you will do well to come prepared for riding, for you will not meet with any carriages at Stockport, nor are the roads to Warrington proper for them; when you get to a place call'd Bullocks Smithy, about two miles short of Stockport, enquire for Offerton, Mr. Roe late of Birmingham now lives there, and we shall be glad to see you. If you'l write to me time enough, & be particular enoh in your time, I will endeavour to meet you with my own chaise, or send a servant for that purpose."

Dr. Aikin accepted the invitation, and another letter is inflicted upon him by Mr. Seddon relative to a house which he recommends him to take, which is "handsomely sashed to the front, with a flight of five steps to "the entrance."

Of the three tutors now in residence, two were amongst the most eminent of the Dissenting Divines in England. Not many years ago it would be quite unnecessary to speak of the many and varied accomplishments of Taylor and of Aikin. It will draw me far from my subject if I say all I could wish to say of these great good men. But time has laid his hand upon their images, and something must be done,—some few words must be said,—to clear away the moss and rust and decay which hang around and corrode them.

Dr. Taylor of Norwich (whose descendants number among them the present Gresham Professor of Music, and many other accomplished and eminent men) was one of the first Arians who ministered to the English Presbyterians. His learning was so generally acknowledged, that in 1754 all the English and Welsh Bishops and Archbishops, with but four exceptions, were among the subscribers to his great Hebrew Concordance. His publications were so widely read, that even Robert Burns had read his Treatise on Original Sin, and in his Epistle to John Goudie says

[&]quot;'Tis you and Taylor are the chief" Wha are to blame for this mischief."

Bishop Bathurst of Norwich used to say that if he understood St. Paul's Epistle to the Romans, he owed it to Mr. Taylor's volume on the subject.

One of his principal works was translated into German, and several of them found their way into the library of Schleiermacher and other great theologians of Germany. Such was the scholar and divine who became the first tutor in the Academy. He was a great loss to the congregation which he left at Norwich; and in leaving them for what was indeed a sphere of greater responsibility and higher usefulness, he was nevertheless sacrificing a dear home, pecuniary advantages, and the blessings of a free and independent position. And his sacrifice was greater than at the time he knew. Scarcely two years pass, and Dr. Taylor has learnt a sad lesson, which would have been spared to him, had he remained the loved and faithful pastor of a loving and affectionate people. But at first no one could have been better suited to his post than Dr. Taylor. The charge to his pupils, with which his lectures in Divinity were prefaced, has been often quoted in illustration of English Presbyterian principles, and is so truly noble, that you will perhaps forgive my quoting it once again:—

"I do solemnly charge you, in the name of the God of Truth, and of "our Lord Jesus Christ, who is the way, the truth, and the life, and before "whose judgment-seat you must in no long time appear, that in all your "studies and inquiries of a religious nature, present or future, you do "constantly, carefully, impartially, and conscientiously attend to evidence "as it lies in the Holy Scriptures, or in the nature of things and the "dictates of reason, cautiously guarding the follies of imagination and the "fallacy of ill-grounded conjecture. Second, that you admit, embrace "or assent to no principle or sentiment by me taught or advanced, but "only so far as it shall appear to you to be supported and justified by "proper evidence from revelation or the reason of things. Third, that if, "at any time hereafter, any principle or sentiment by me taught or advanced, or by you admitted and embraced, shall upon impartial and "faithful examination appear to you to be dubious and false, you either suspect or totally reject such principle or sentiment. Fourth, that you "keep your mind always open to evidence; that you labour to banish from "your breast all prejudice, prepossession, and party zeal; that you study "to live in peace and love with all your fellow-christians; and that you "steadily assert for yourself, and freely allow to others, the unalienable "rights of judgment and conscience."

The Rev. Dr. Aikin (who was father of the celebrated physician and of Mrs. Barbauld) had been a pupil of Dr. Doddridge. He was, says Gilbert Wakefield, "a gentleman whose endowments as a man and as a scholar it "is not easy to exaggerate by panegyric. * * * His intellectual attain- "ments were of a very superior quality indeed. His acquaintance with "all true evidences of revelation, with morals, politics and metaphysics





THE WARRINGTON ACADEMY, 1757.

"Mark where its simple front you mansion rears,

The nursery of men for future years!"

My Barbauld.



THE WARRINGTON ACADEMY, 1762.

"Lo there the seats where Science loved to dwell"
Where Liberty her ardent spirit breathed!"

CW. Barbaul

"was most accurate and extensive. Every path of polite literature had been traversed by him and traversed with success. He understood the Hebrew and French languages to perfection, and had an intimacy with the best authors of Greece and Rome superior to what I have ever known in any Dissenting minister from my own experience." Mr. Wakefield's testimony is borne out by all—and they were many—of Dr. Aikin's friends. He was, if any can be,

Integer vitæ scelerisque purus, a man of strictest honour and most blameless life.

Of Mr. Holt, the mathematical tutor, I need say nothing. Miss Aikin calls him "a man whose whole soul was absorbed by his science;" and the writer in the Monthly Repository, who devotes some two pages to his character, seems utterly bewildered at finding any one so dull and dry and colourless.

Mr. Seddon, to whose exertions the Academy was owing, was a practical and useful man, full of energy and intelligence. He had many friends; and Dr. Percival, in an epitaph which is not on Mr. Seddon's grave, speaks of "his cheerful piety, universal benevolence, extensive knowledge, "and temperate zeal for civil and religious liberty." I am afraid though, that, like Mr. Holt, Mr. Seddon must have been a dullish person. His letters are heavy and wearisome, and his only idea is to extol the Academy. Miss Aikin, in a letter which I received from her in 1856, tells me "Mr. "Seddon did not scruple some stout puffing on behalf of the Academy. "My aunt, (Mrs. Barbauld), on receiving at Palgrave one of his annual "official statements, wrote to my father, 'Who hath believed our report?' "My father, after being taken when a boy to hear Mr. Seddon, excused "himself for not bringing his father the notes of the sermon which he was "always required to make, because he said with all the attention he could "pay he could not make out what it was about—' Nor I neither,' was the "answer."

Not long since I had the pleasure of spending a day at Warrington in order to see for myself the old Academy, and the more pretentious buildings to which, in 1762, the Academy was transferred. The old Academy is that which Mrs. Barbauld immortalized in lines which every one knows from "Enfield's Speaker." She bids us

[&]quot;Mark where its simple front you mansion rears,

[&]quot;The nursery of men for future years,"

and tells us that the "Mersey"

"Reflects the ascending seats with conscious pride."

The Rev. W. Turner, too, speaks of "A range of buildings" with "a "considerable extent of garden ground, and a handsome terrace walk on "the banks of the Mersey, possessing altogether a respectable collegiate "appearance." Perhaps it might have been wiser to take the old Academy on trust, and let fancy picture the building worthy of Mrs. Barbauld's poem and the energy of Mr. Seddon and the Warrington Committee. At least I should have supposed that the Academy faced the river, and that there was something to distinguish it from surrounding houses. This blissful ignorance, however, has been dissipated, and I know now that the very "simple front" of the ugly, mean, old brick house never fronted the river, and that a narrow, dingy side with six windows ranged in pairs along it, and a single attic window, surmounted by a weathercock, was all that the river, with all its "conscious pride," could manage by any possibility to reflect.

Such were the tutors, and such the buildings, of the Warrington Academy during the first years of its short life.

The summer of 1760 saw the beginning of a series of misunderstandings between Dr. Taylor and the Trustees, which were only terminated the following year by Dr. Taylor's death. Mr. John Taylor of Norwich, in his "History of the Octagon Chapel," says of his grandfather, "His own "failing health, anxiety for the health of his wife, and disappointments and "annoyances connected with the Academy, conspired to render Dr. Taylor's "brief residence at Warrington entirely unhappy." In the minutes of the Academy, the whole story appears at length. Dr. Taylor had been complaining of "the uneasiness he is under in his present situation," and the Trustees write and ask him to specify his complaints. And then follows a long string of complaints from the Doctor, with the comments of the Committee upon each of them. Dr. Taylor does not approve of the situation of the Academy, and some books which he asked for had not been purchased,—Mr. Seddon has invaded his province of Moral Philosophy by giving a course of lectures,—the Committee have no right to interfere in the internal arrangements of the Academy. The Committee reply strongly and firmly to all these charges, but make a concession about the three books, and, with a slight touch of sarcasm perhaps, they send him the following resolution:-

"Agreed Nem. Con. This is the unanimous sense of this Committee. "Agreed, that the following Books be immediately sent for at ye desire "of Dr. Taylor, viz.:—

" Edwards, on Irresistibility of Divine Grace,

" Pilkington's Script. Criticisms,

"Grotius, on ye Truth of Religion."

We need not enter further into this unhappy quarrel. Traces of its ill effects appear in many of Mr. Seddon's letters, and it gave a blow to the Academy from which it never entirely recovered. The subscriptions from other places might be increased, but the Presbyterian body was no longer united. The friends of Dr. Taylor and many of his old congregation had lost confidence in the management of the Academy, and too often checked or thwarted the efforts of its supporters.*

In 1761, Dr. Aikin was promoted to the Theological Tutorship, which was now vacant by Dr. Taylor's death. Mr. (afterwards the celebrated Dr.) Priestley was chosen to succeed Dr. Aikin as Tutor of Languages and Polite Literature. Of Dr. Priestley it must be unnecessary for me to speak. Eminent as a chemist, a philosopher, a politician and a theologian, he was one of the most remarkable men of his day. It is Coleridge who addresses him as "Patriot, and Saint, and Sage," and whether we agree with, or differ from, his views on Philosophy or Theology, we can have but one opinion of the vastness of his learning, and the purity of his life. He was the greatest of the many worthies of the Warrington Academy.

In the following year, 1762, Mr. Seddon visited London and other towns, in order to beat up new subscribers, and in this he was partially successful. At any rate it was now thought desirable to leave the old Academy, and erect more suitable buildings in another part of the town. The Academy Place, as it is called, which opens out of the Butter Market Street, is to this day a quiet and secluded court. In front stands the Academy, an old brick building, with stone copings, and a clock and bell turret in the centre. It cannot pretend to architectural beauty, but it is not unpleasing with its quaint old-world look, and was certainly a great improvement on the house by the "classic tide" of the Mersey. This second Academy building was also celebrated in verse by Mrs. Barbauld:

[&]quot;Lo! there the seat where science loved to dwell,

[&]quot;Where liberty her ardent spirit breathed."

^{* &}quot;There had been an unhappy difference between Dr. Taylor and the Trustees, in "consequence of which all his friends, who were numerous, were our enemies."—
Dr. Priestley's Life, p. 55.

The lower room of the building is now the printing office of the "War-"rington Guardian;" and the upper room is appropriated as the "Warrington "Church Institute." I wonder if the printers ever hear among the clang and clatter of their presses "the learned echoes talk"; or if the Warrington clergy, in their discussions, ever give a kindly thought or word to Aikin, Priestley, Enfield and the other true-hearted men who once tenanted those rooms!

From 1762 to 1780 was the golden age of the Academy; and of these years the earlier ones to 1767 (when Dr. Priestley removed to Leeds) were the brightest and the happiest. The life of the tutors was of course, in some degree, an anxious one, but there was much of pleasure in their hours of social enjoyment. "The tutors in my time," says Dr. Priestley, "lived in the most perfect harmony. We drank tea together every "Saturday, and our conversation was equally instructive and pleasing. I "often thought it not a little extraordinary that four persons, who had no "previous knowledge of each other, should have been brought to unite in "conducting such a scheme as this, and be all zealous necessarians as we "were. We were all, likewise, Arians; and the only subject of much "consequence on which we differed respected the doctrine of atonement, "concerning which Dr. Aikin held some obscure notions. The only "Socinian in the neighbourhood was Mr. Seddon of Manchester, and we "all wondered at him."

But there were other attractions in the Warrington circle besides the tutors and their philosophy. "We have a knot of lasses just after your "own heart," writes Mrs. Barbauld (then Miss Aikin) in 1772 to her friend Miss Belsham; "as merry, blithe and gay as you would wish "them, and very smart and clever—two of them are the Miss Rigbys." We have a West Indian family too that I think you would like, a young "couple who seem intended by nature for nothing but mirth, frolic and "gaiety." It was a sad day for Warrington when Miss Lizzy Rigby became Mrs. Bunny, and Miss Sally Rigby was wooed and wedded by Dr. Parry of Bath—it was sadder still when Mr. Edwards, the lively West Indian, had to slip away from his creditors and leave Warrington for ever—saddest of all was it when "our poetess" herself, after winning the hearts of half the students, some one or two of whom for her sake lived (I am informed) "sighing and single"—when she too followed the Miss Rigbys'

unfortunate example, and was carried off to Palgrave by that queer little man, whom henceforth she was to "honour and obey." But these catastrophes were not yet. And then, besides the Rigbys, the Aikins, and, a little later on, the Enfields—were the Priestleys and the Seddons. Of Dr. Priestley's wife—every one, and especially her husband (who ought to know) speaks most highly. Mrs. Seddon was a lady of fortune and position. She was daughter to a Mr. Hoskins, who had been equerry to Frederick Prince of Wales. I have no doubt she was a very fine lady at Warrington. I know that she was an affectionate wife, and spelt abominably. Among the Seddon papers* is a letter which her husband wrote to her during a short absence in 1766. On the back of his letter Mrs. Seddon prepares a rough draft of an answer to her truant husband. The word which puzzles her most is "adieu," and she has to spell it over three times before she can determine whether the "e" comes before the "i" or the "i" before the "e." The knotty point is at last settled and the fair copy written out; and this too, her careful husband put away and preserved among his papers. I cannot resist quoting the last paragraph of this most charming but laborious letter. "Let me hear of you as "often as you can; for it does me more good, and has a much stronger "affect upon my spirits than either eather or salvolatiley. Adieu my dear, "except the sincerest and best wishes for your health and happiness, of one "whose greatest pleasure in this world is in subscribing herself your truely "affectionate wife,-J. Seddon.

"P.S. I shall want cash before you return; what must I doe? Pray put me in a way how to replenish. Remember me propperly to every body."

No wonder this excellent wife, who in 1770 became a widow, should have received in 1773 a letter from a certain Mr. Richard Meanley, which commences thus—" Madm.—There is a gentleman of my acquaint—"ance, a widower, who has such a high opinion of the happiness of the

^{*} Let me here add a note about Mr. Seddon's correspondents. Among them were Dr. Priestley (sixteen of whose letters I have discovered), Dr. Kippis, David Williams (who founded the Literary Fund), Dr. Percival, Thomas Bentley of Liverpool (whom we know from Mr. Boardman's "Bentleiana"), Rev. W. Turner of Wakefield, and Dr. Aikin. The most amusing letters, however, are those of R. Griffiths, the bookseller, and publisher of the "Monthly Review,"—a man, the unfavourable side of whose character is freely, though not quite fairly perhaps, given to us in Mr. Forster's life of Goldsmith.

"married state that he is desirous of entering into it again; if you have "the same, and are disengaged, he proposes, by your permission, to pay "you a visit."

I can find no rough draft of Mrs. Seddon's answer to this letter.

Of Mrs. Barbauld (though I have often quoted her), and of her brother John Aikin, the scholarly physician, I have said nothing, nor was it needed. The memoir which his daughter wrote is the best monument of the one. The other is dear to the memory of every child who learns the "hymns in prose;" and but the other day Lord Brougham paid an eloquent tribute to her memory in the course of a debate in the House of Lords.

Here is a pleasant little sketch of Warrington society, from an unpublished letter of Miss Lucy Aikin's. "Both 'bouts rimés,' and 'vers 'de société' were in fashion with the set. Once it was their custom to slip 'anonymous pieces into Mrs. Priestley's work-bag. One 'copy of verses,' a very eloquent one, puzzled all guessers a long time; at length it was 'traced to Dr. Priestley's self.* Somebody was bold enough to talk of 'getting up private theatricals. This was a dreadful business! All the 'wise and grave, the whole tutorhood, cried out, it must not be! The 'students, the Rigbys, and, I must add, my aunt, took the prohibition 'very sulkily; and my aunt's Ode to Wisdom was the result."

And then, besides the residents, there were distinguished strangers who came to Warrington to consult the Tutors, or to visit the students. Howard the philanthropist came, in order that the younger Aikin might revise his MSS. and correct his proofs. Roscoe of Liverpool came, and first learned to care for botany from his visits to the Warrington Botanical Gardens. Pennant, the Naturalist; Currie, the biographer of Burns; and many a Presbyterian Minister, eminent then, though now forgotten,—were also among the visitors to that Athens of our county.

Warrington was then an enviable place, and I for one agree with Miss Lucy Aikin, when she says in a letter now before me, "I have often "thought with envy of that society. Neither Oxford nor Cambridge could

^{*} Dr. Priestley says in his memoirs, "Mrs. Barbauld has told me, that it was the "perusal of some verses of mine that first induced her to write anything in verse; so "that this country is in some measure indebted to me for one of the best poets it can "boast of." p. 49.

"boast of brighter names in literature or science than several of those dissenting tutors,—humbly content in an obscure town, and on a scanty pittance, to cultivate in themselves, and communicate to a rising generation, those mental acquirements and moral habits which are their own exceeding great reward. They and theirs lived together like one large family, and in the facility of their intercourse they found large compensation for its deficiency in luxury and splendour."

In 1767 the Academy lost the services of Dr. Priestley, and in 1770 the no less valuable services of Mr. Seddon. Dr. Priestley resigned, he tells us, partly on account of his wife, and partly because the salary of £100 per annum with a house, and £15 a year for boarders, was insufficient for the maintenance of his family.

The death of Mr. Seddon, who was seized with apoplexy when on horseback, was a sudden and a fearful blow. To him was owing the very existence of the Academy; as secretary, he had been from the beginning its most energetic supporter; as "Rector Academiæ," he had been for the last few years the adviser of the tutors and the guide and instructor of the students. His lectures on oratory and grammar were prepared with care, and were considered powerful and effective. Several of his MSS. are still in the library of Manchester New College, and one small MS. volume of lectures is preserved in the library of Renshaw Street Chapel, Liverpool. Dr. Priestley was succeeded by Mr. John Reinhold Forster, a German scholar and naturalist. This eminent man, who afterwards accompanied Captain Cook in his second voyage round the world, and who was one of the best of living botanists, undertook to fill the chairs of Natural History and Modern Languages, in addition to which he took the junior classes in Latin and in Greek. Mr. Forster, however, remained at Warrington but a short time; his irritable temper, and the entire want of economy which he displayed in all his arrangements, made him out of place in a situation where mutual forbearance and courtesy were so much required, and where, among the tutors at least, extravagance was unknown.

Mr. Enfield was chosen to fill the place of Mr. Seddon, and to him, who remained a tutor in the Academy to the last, was entrusted the double charge of the tutorship of the Belles Lettres, and the office of * Rector

^{*} Perhaps I should have stated that the origin of this office was the necessity of having some responsible person to superintend the morals of the students, who in 1767 were collected together in a range of new apartments built on the collegiate principle,—formerly they had been boarded in separate private houses.

Academiæ, which last post is about equivalent to a deanship in the colleges of the older universities. Dr. Enfield was a good and accomplished man, and his compilation called "The Speaker" is still an authority in its humble way.

Before me lies a little quarto pamphlet of seven pages, entitled "Report "of the State of the Warrington Academy, by the Trustees, at their "Annual Meeting, June 28th, 1770." The Trustees inform the public that the design of the Academy is the "liberal education of youth in "general." They prepare students for commerce or the law, for physic or the ministry; they are anxious about discipline and good order, industry and virtuous behaviour, and they wish the terms of the education to be as "easy" as the nature of the design and circumstances will permit. They say that Dr. Aikin undertakes the Latin and Greek classes, Mr. Holt the Mathematical department, Mr. Enfield the lectures on Language, on Commerce, and on History. There are also tutors for modern languages, (a Mr. La Tour was Mr. Forster's successor in this department) and a teacher of drawing and book-keeping. "To prepare students for the "ministry, a course of studies which employs five years is appointed." For these students there were courses on Logic, Ontology, Pneumatology, Ethics, Jurisprudence, the Evidences of Revelation and its peculiar Doctrines, Jewish Antiquities, Church History and the Pastoral Office. annual fees to each tutor are £3 3s., and £1 1s. must be paid for the use of the library. There follows an admission that the students have given ground of complaint as to the "exactness of the discipline," and a promise that for the future new regulations shall be put in force. Several of these regulations are referred to,—an appeal for support is made, and the report winds up with a list of the committee and officials.

This report was needed, for the Academy was not gaining in the confidence of the public, and £1700 (for which the trustees held themselves responsible on a mortgage of the premises) had just been spent in the erection of the new range of students' lodging rooms.

In 1772, the death of Mr. Holt, who had been mathematical tutor from the very beginning, caused another vacancy. He was succeeded by the Rev. George Walker. Mr. Walker was a learned and a most excellent man, and Gilbert Wakefield and Miss Lucy Aikin, both bear witness to the affection and regard which he inspired in all who knew him, His





The House of D. Enfield, academy court.



The House of DT Priestley;



The Rouse of D. Aikin,



The house of Filbert Wakefield,
* BEWSEY ST.

residence in Warrington, however, was of barely two years' duration;—the salary which could be afforded to him was too small for his necessities, and he was compelled to resign his post. "In fact," as Miss Aikin says, "the alma mater of Warrington was ever a niggardly recompense of the "distinguished abilities and virtues which were enlisted in her service."

After Mr. Walker's departure Dr. Enfield undertook the mathematical department in addition to his own laborious courses: and in consequence of Mr. Rigby (father, I suppose, of the two beauties) resigning his situation as "provider of the commons," Dr. Enfield good-naturedly also added the commissariat to his other duties. Dr. Aikin in his turn relieved his colleague from the logic; and Mr. Aikin, afterwards the eminent surgeon, who had now settled in Warrington, lectured on chemistry and anatomy to those who chose to attend him.

The business of the Academy went on from 1774 to 1778, under the sole management of the two tutors, Aikin and Enfield, who were really performing the same work which had hitherto been divided among three.

In 1778, however, Dr. Aikin began to fail, and he was obliged to obtain the assistance of a former pupil, Mr. Houghton. The following year Mr. Gilbert Wakefield was chosen a regular third tutor, and a few months after Dr. Aikin died. For twenty years had he been tutor at the Academy, and his death was to it an irreparable loss. A noble man! nor undeserving of the words which Gilbert Wakefield inscribed upon his tomb:—

Comis, Benevolus, Pius, Et Hominis et Christiani munera Cumulatissime explevit.

Dr. Nicholas Clayton of Liverpool, was now (1781) appointed tutor in theology, and he, Dr. Enfield and Mr. Wakefield remained tutors till the Academy's dissolution in 1786.

I must now say some few words respecting the two new tutors, who were henceforth Dr. Enfield's colleagues.

Dr. Clayton had been minister to the Octagon Chapel in Liverpool, where an attempt had been made for the first time to introduce a Liturgy among Protestant Dissenters. The attempt failed, and Dr. Clayton, after ministering for a few years to the Benn's Garden congregation, received the invitation to Warrington. His sermons were noticeable for the beauty of their style, and the originality of their thought. He was so modest,

however, that his friends could never persuade him to publish; and, dearly loved as he was, his name will soon be forgotten, except as the last tutor of the Academy. He died in Liverpool, in the year 1797.

It is a remarkable proof of the liberality of opinion which was so marked a characteristic of the Academy, that Gilbert Wakefield should have feared that his secession from the Church of England would be an impediment to his appointment as tutor. Certain it is that, when he applied for the post, the Trustees (every one of whom was a Presbyterian) were anxiously looking for some Clergyman of the Church to whom they might entrust it. Whether they trusted to conciliate further support by this mode; whether they thought that a University man might help in maintaining the relaxed discipline; whether they believed some fresh system of study would probably be introduced; or, whether they were actuated by a hope that theological differences would thus be broken down, I cannot tell. By Mr. Wakefield's appointment, two at least of these objects would be secured; and the strong testimonials of Dr. Jebb and others gained him the tutorship.

Mr. Wakefield will hereafter be remembered as the editor of Lucretius. A learned and ingenious, though a somewhat careless, scholar, he claims his rank among the foremost of Cambridge men who have thrown light on the pages of the ancient classics. His conscientious integrity was shown by his resignation of his position in the Church of England. His zealous ardour was evinced in later years by a political pamphlet, which cost him a two years' imprisonment. His controversial writings may well be allowed to die. He was irritable and intemperate, and few causes but would have suffered from his injudicious advocacy. His autobiography seems to me one of the most disagreeable and pretentious books I ever read. A vein of insufferable conceit runs through it. Quotations and classical allusions, and italicised sentences bristle on every page. If he burns a letter, he consigns it, so he says, to "the limping deity of Lemnos." He has an illness, and he announces it in three not very relevant lines of Virgil, to which he kindly furnishes a translation. He recalls the great men who have been educated at Cambridge, and as he thinks of them, we learn that "an awful complacency breathed over my spirit." Very justly may we neglect Gilbert Wakefield's other writings, but his Lucretius will probably be remembered so long as in England Lucretius itself is studied.

There is one question more in connexion with the tutors of the Academy which is too curious to overlook, though I am not enabled to throw much fresh light upon it. The Rev. W. Turner says, in one of his papers in the Monthly Repository, that among the foreigners who from time to time were engaged to fill Mr. Reinhold Forster's place, as teachers of modern languages, was a M. le Maitre, alias Mara, and this he believes was probably the infamous Marat of the French Revolution. together the following chain of evidence on the point. "Mara, as his "name is spelt in the minutes of the Academy, very soon left Warrington, "whence he went to Oxford, robbed the Ashmolean Museum, escaped to "Ireland, was apprehended in Dublin, tried and convicted in Oxford "under the name of Le Maitre, and sentenced to the hulks at Woolwich. "Here one of his old pupils at Warrington, a native of Bristol, saw him. "He was afterwards a bookseller in Bristol, and failed, was confined in "the gaol of that city, but released by the society there for the relief of "prisoners confined for small sums. One of that society, who had per-"sonally relieved him in Bristol gaol, afterwards saw him in the National "Assembly in Paris in 1792." Add to this, that Marat was certainly in England at or about this time, and had just published a philosophical essay on the connexion between the body and soul of man. There is also the fact that a certain walk in Warrington still goes, so I am informed, by the name of "Marat's Walk."

Still I fear the testimony on the negative side is stronger. In the first place Mr. Turner is, I believe, in error about the name of Mara appearing on the minutes of the Academy. I have searched them through, and employed the assistance of another for the same purpose, and the name of neither Mara nor Le Maitre could be found by us. In the eight or ten Academy reports before me I find a M. Fantin la Tour, but here, too, the name of Mara or La Maitre is absent. Lastly, Miss Aikin, to whom I applied, informs me, "there was an alarm about Marat, but "investigation set the matter at rest: they were certainly different men."

Even were not some account of the students and student life in itself an important page in the history of the Academy, it would still be necessary to refer to it, as the conduct of the students was one of the chief causes which led to the Academy's dissolution.

A complete list of the students may be found in the Monthly Repository

of 1814, and I have another list in manuscript, drawn up by Serjeant Heywood, but not including the last three years. There are some slight discrepancies as regards dates and christian names, but the lists are substantially the same, and either of them is sufficiently correct. During the whole time of the Academy's existence (that is from 1757 to 1786) there were 393 students, and the average number of entries was, therefore, about fourteen each year. This average remains steady throughout, and indeed during the last years there is rather an increase than a falling The first student who entered the Academy was one of the most distinguished in after life. The name of Dr. Percival, the physician and moralist, still claims its place among the worthies, not of Warrington alone, but of the whole of Lancashire. The vast majority of the students became either Unitarian ministers, or wealthy merchants, or were afterwards lost sight of altogether: here and there, however, we may find some name, which is or ought to be familiar to us, and you will allow me to draw them out from these long catalogues of the forgotten. Of Dr. Aikin, the physician, I have already spoken; he entered the Academy in the second year of its establishment. Dr. Rigby, of Norwich, also a physician,-Dr. Estlin, of Bristol, a well known scholar and divine,—Serjeant Heywood, author of the "Vindication of Mr. Fox's History," and a Welsh judge,— Archibald Hamilton Rowan, the Irish rebel,—and Malthus, the political economist,—such is a short and somewhat incongruous list of the best known among the students. But there were many others who were noted in their day, and who achieved success and fortune in their several callings, conspicuous among whom I find Lord Ennismore, Sir James Carnegie, of Southesk, Mr. Henry Beaufoy, Rev. Pendlebury Houghton and Dr. Crompton.

In looking over the students' names, I cannot but notice how many of their descendants are still the staunch supporters of the liberal Dissent, which was the distinguishing characteristic of the Academy. Some families, like the Willoughbys of Parham, whose last lord was educated at Warrington, have now died out: others, like the Aldersons of Norwich, of which family the late judge was a member, have seceded to the Church of England. But we still find united the lineal and the theological successors of the Academy's students, in the Rigbys, the Martineaus and the Taylors of Norwich, the Heywoods and the Yateses of Liverpool, the Potters of Manchester, the Gaskells of Wakefield, the Brights of Bristol,

the Shores of Sheffield, the Hibberts of Hyde and the Wedgewoods of Etruria.

But among the students were many, who could not but cause great anxiety to those who had charge of the Academy, and, most trying of all, there seem to have been some hot-blooded young Irishmen, and some still more hot-blooded young West Indians, sons of planters in Jamaica, St. Kitts and Antigua. Indeed the tutors seem to have admitted any one who chose to apply for admission, and Archibald Hamilton Rowan, in his memoirs, only alludes to the Academy as being the place "where I spent "a year of my rustication" from Cambridge.

Certainly the Rev. William Turner (himself a student at the Academy) gives a terrible picture of the insults to which that kindly and gentle Dr. Enfield was exposed as Rector Academiæ, "by the dissipated and "inflamed West Indian, whose pastime it had been from his youth to "sport with human sufferings; by the profligate outcast of our great "public schools, who had learned all the evil without any of the good of "those establishments, and was sent hither as a dernier ressort; and by the "pampered pet of large fortune, who, from the treatment he had seen "given, and been allowed himself to give, to his private tutor at home, "had learned to consider every tutor as a sort of upper servant." And unfortunately there was no sufficient discipline to restrain the evil or punish the offenders. Expulsion was the worst penalty that could be inflicted; and expulsion was a penalty for which the offender would not care, and for which the Academy itself might suffer. Plan after plan was tried, and plan after plan failed. Did the students lodge, as at first, in the tutors' houses?—they fell in love with the young ladies, and studied anything rather than the divinity, and belles lettres, and logic, and rhetoric, which were the supposed attractions of the place. Did they live all together, as afterwards they did live, in a range of college rooms?—they got into debt, they played mad pranks in the town, and cost Mr. Seddon and then Dr. Enfield, their Rectors, many a long hour of anxiety and When I speak, as I soon must do, of the discussions respecting the dissolution of the Academy, I shall have to speak more at large of Dr. Enfield's feelings on this subject.

Let me now gather, as best I can, some stray illustrations of the wild life of the wilder of the Academy students. Of the quiet and respectable

set, who afterwards reflected credit on their "alma-mater," I can discover very little. I suppose there is nothing much to discover, however. They attended the tutors' lectures, and took walks into the country with young Dr. Aikin, and listened to sermons in Cairo street Chapel, and otherwise prepared themselves for a calm future of happy usefulness.

Meanwhile the West Indians were bewailing their native islands, and shocking the tutors by declaring that the earliest request of a planter's child was always for a "young nigger to kick." And then there was the love-making in the tutors' houses. The beautiful Miss Rigbys made wild work with the students' hearts; and the trustees had to insist that they must be removed from the house if any students stayed there. And so for a time they were; but Mrs. Rigby's health fortunately broke down, and the young ladies were brought back again. Rousseau's "Héloise," too, had much to answer for, and at its appearance (so Miss Aikin tells me), "every body instantly fell in love with every body;" and then it was that Mr. Barbauld won his bride.

Then the politics of the students were no less inconvenient than their flirtations. Strong Whigs, and something more, as the tutors themselves were, they were alarmed and terrified at the anti-English zeal, which, during the American war, was displayed by several of the students. One of them, who boarded at Dr. Enfield's, insisted on his right to illuminate his own windows for an American victory; but this the Doctor declined to allow, as it committed himself, the master of the house.

Many are the stories told of the practical jokes which these wicked students played.

One morning the landlords of the different inns in Warrington might have been seen with bewildered looks gazing up to the sign-boards which swung above their hospitable doors. Well might they be bewildered! In a single night the "Red Lion" had become the "Roebuck," the "Nag's Head" was the "Golden Horse Shoe," the "Royal Oak" had changed places with the "Griffin," and the "George and the Dragon" appeared now as the "Eagle and Child." Another story is told of a most respectable lady who was coming from a ball. Her carriage stops the way—she is stepping towards it. But—what and how is this? The footmen are devils' imps, with torches in their hands—the coachman grins down with a demon's face from the box; and from the carriage comes

forth to escort the lady home a terrible figure, but one easy to be recognised—with horns, and tail, and cloven foot. One student procured a black ox-skin, and haunted Bank street night after night, till houses were deserted, and Bank street was half ruined. Another student put on a bear's skin, and frightened an old nut-woman who believed it was the devil.

Perhaps the wicked Miss Rigbys were the inspirers of these wicked pranks. Certainly they knew how to play them. On one occasion they had asked some of the students to supper. Hams, and trifles, and potted beef and other luxuries were placed before them, and the students were asked to help the ladies. But the hams were made of wood, and the trifles were plates of soap-suds, and the potted beef was potted sawdust, and the other luxuries were equally tempting and equally tantalizing.

There are other traditions of this kind still current in Warrington; but it would be unnecessary to quote more in order to shew how relaxed was the discipline and how wild the students. Among the Seddon papers however there are letters relating to two of Mr. Seddon's pupils, which throw light on the way in which the Rector Academiæ dealt with particular cases, and which are not uninteresting in other respects.

In the August of 1768, Mr. Seddon received a letter from Mr. Samuel Vaughan, of Bristol, complaining bitterly of the disappointment he has felt as regards the Academy, and the "too great latitude allowed the students." He thus expostulates:—

"My Son Ben's expenses during ten months absence amounts to "£112, and Billy's to £59 12s.; this (should nearly suffice for the "University, and) of its self, would to many be a sufficient objection, but "in my opinion, the consequence of the expence is abundantly more "pernicious, as it naturally leads to Levity, a love of pleasure, dissipation, and affectation of smartness; diverts the attention, and prevents the "necessary application to serious thought and Study. When I sent my "Sons so great a distance, it was with a view to preserve them from the reigning contagion of a dissipated age, to imbibe good Morals, acquire "knowledge, and to obtain a manly and solid way of thinking and acting, "but they are returned with high Ideas of modern refinements, of dress and external accomplishments, which if ever necessary, yet resumed by "them much too soon. As one instance—they think it a Sight to appear "without having their hair Frissened, and this must be done by a dresser, "even upon the Sabbath. No person can more wish for, and encourage an "open and Liberal way of thinking and acting than my self, yet do I

"think that day should be kept with Ancient Solemnity, for to say the "least, the reverse gives offence to many serious good People, and exhibits "an Ill example at a time when Religion is at so low an ebb, as to stand "in need of every tie and prop (whether real or imaginary) for its support, "therefore any relaxation or Innovation under sanction of such a seminary "as yours, may have the most pernicious tendency, for when restraints even "in unesentials are removed they are frequently a clue or gradation, to the "fashionable levity of the Age and Irreligion."

But the same post brought Mr. Seddon a second letter. The accused Ben Vaughan (who afterwards became a useful member of society, and a member of Parliament also,) wrote to Mr. Seddon, expressing his contrition for the past, and promising penitence in the future. He is afraid his conduct may have acted injuriously on the Academy,—he has encroached on Mr. Seddon's goodness and forbearance,—ill-natured people will say ill-natured things.

"They say we are gay and idle, business gives way to pleasure, "and instead of receiving improvement we are taught how to live idly. "This has been said in my hearing. But tho' I am certain that none of "us have been vicious, but only gay, this has been laid to our charge. "Our Recreations have been innocent tho' expensive—but they imagine "that they cannot be expensive without being criminal. I believe that "none of us have received any injury from ye Liberty allowed us, but "others may make a bad use of it."

And then, having finished his confession, Mr. Benjamin Vaughan confides to Mr. Seddon that Mr. Wilkes will probably get a pardon from the crown, and that he (Mr. Vaughan) does not believe that Mr. Wilkes ever wrote the "North Briton.—No. 45."

But Benjamin Vaughan's contrition was not very fruitful. Next year he has again to write to Mr. Seddon, to confess that he cannot show his accounts to his father, and to sign himself, "your affectionate but "distressed pupil." He compares too so badly with his brother, who has only spent £60—but here is an extract from his letter—

"My father, last year, was extremely angry at an acct. I gave him of £112, spent at Warrington—the present sum is £179. Bill disclaims all share in the expenses above £60. I then have £119 to answer for; I who promised such strict amendment, and who had as many excuses last year as at present. I had more journies, more music, and yet, according to his knowledge, have spent £7 more in my present year of pennance, repentance, &c."

Another series of letters refers to the notorious Archibald Hamilton

Rowan. He will be remembered by every student of Irish history as the friend of Napper Tandy, and as having been tried for sedition in 1792. But he will be remembered by many more as the prisoner, in whose defence Curran uttered his noble and famous eulogium on British law—that law "which proclaims even to the stranger and the sojourner the moment he "sets his foot on British earth, that the ground on which he treads is holy "and consecrated by the genius of universal emancipation."

In 1769 this Hamilton Rowan (whom, by the way* Mrs. Schimmel-penninck in her late Memoirs appears to confound with "Fighting Fitz-"gerald," who never was at Warrington,) this future rebel, having been rusticated from Cambridge, came to pass his year of banishment under the care of Mr. Seddon. The experiment was not a hopeful one: it proved signally unsuccessful.

In the Biography of Hamilton Rowan, which was afterwards written, his residence at Warrington was scarcely alluded to,—and except a casual allusion to his early admiration for Mrs. Barbauld, as a girl, nothing had been recorded of this period of his life. The letters of Mr. Seddon help to fill up the gap.

Mr. Hamilton, the father, writes on the 1st of June, to announce the coming of his son, who is "to have any sum not exceeding one hundred "pounds a year." Two months only pass and Mr. Seddon has to send the following letter to Archibald Hamilton Rowan, Esq., at the Swan with two necks, Lad Lane, London.

"HEREFORD, August 2nd, 1769.

"SIR,

"From the clandestine manner in which you left Warrington, "and withdrew your self from our protection, I did not expect to hear "from you any more: though when I consider the indecent and shameful "manner in which you behaved at Liverpool, I do not wonder at it: be "assured, Sir, that such conduct will not be permitted at Warrington, and "I hope you will not return there any more. You were told very plainly "and freely on what Terms your continuance there depended: you promised "to comply with them; but you have acted contrary to them in every "instance: there is no dependence to be had on your resolutions and "promises; and therefore I beg to repeat to you, what has several Times

^{*} Indeed, almost every statement made by Mrs. Schimmelpenninck respecting the Academy is incorrect.

"been said to you, that you had better retire from the Academy at War"rington, and not expose y" self to the disgrace of being dismissed in
"another manner. I do not think my self at Liberty to send you a Dft.
"on Messrs. Allen's and Marlar, they are proper Judges of what is proper
"and necessary, and to them I refer you. I have written to them this
"post, and I beg you will wait on them immediately on the receipt of this,
"and follow the advice they give you.

"I was very much disposed to be your friend, and to have led you into "such a plan of Study and course of behaviour as would have been useful "to you, but this is a pleasure you have absolutely refused to

" Sr

"Yr most humb. Srvt

"J. SEDDON.

And then follows a letter from Mr. Hamilton Rowan respecting his debts.

"Nook, Sat. Eve. 1769.

"SIR,

"I have, according to your desire, recollected as much as I was "able, the manner in which the £40 was expended; the receipts, which "I send you, I think amount to £16 17s. 6d. which together with 2 Guineas "which I reckon for washing, mending, &c., 5 Guineas which I borrowed "from you, and the Trifle due to the Academy, bring the amount to "£27 5s. 6d. £6 or £7 to Mr. Jones, and £4 4s. for one month's "Lodging here, I paid out of £15 5s, rec^d from Mr. Jones. Mr. Wain-"wright's bill remains unpaid, which I think is the only bill, except Jones "his, I owe in Warrington. 5 Guineas will be sufficient for the journey; "but I shall have one month's Lodging to pay here, before I go; if I can "sell my Horse, I shall not want so much money; I expect to sell her "for eleven Guineas, and unless I can gett that sum for her, I shall not "part with her, from this Sr you may judge of ye Situation of

"Your Obliged Humble Servt ARCHd HAMILTON ROWAN.

Lastly, we have five agonizing letters from Mr. Rowan's London agents, Messrs. Allen, Marlar, & Co.:—they sympathise with Mr. Seddon in his troubles, they "make no doubt of his good disposition towards this young "gentleman," in whose "capacity, politeness, and goodness of heart" they have still great hopes, they condemn Mr. Rowan's "imprudence," but think his desire to pay his debts at Warrington, "redounds to his reputa-"tion":—and then reminding Mr. Seddon that his refractory pupil is heir to a good fortune, they express their anxiety to arrange matters so that all may still be right.

But Mr. Hamilton Rowan had nevertheless to leave Warrington. His next appearance in public brought him into other companionship than quiet Mr. Seddon, or apologetic Messrs. Allen and Marlar.

It is but right, however to add, that there are among this Seddon correspondence letters of quite another tone. I find one letter from young George Willoughby, afterwards seventeenth and last Lord Willoughby of Parham, * and last of the old Presbyterian nobility of England; he, being away for the vacation, writes to Mr. Seddon "I am at a loss for words to "express myself in that affectionate manner that you do to me, but you "know I mean it." And he goes on to assure him that it is "with a great "deal of pleasure" that he will once more return to Warrington.

One more letter I cannot but refer to, as showing a curious tinge of intolerance in even the Warrington Academy and its supporters. A worthy correspondent of Mr. Seddon is astonished to hear that a student in whom he took interest had a "Methodist" turn, and the correspondent is quite surprised, and very much scandalized. He had no idea of such a thing. Had he had such an idea, he would never have taken any trouble or care about the young man. So even the Warrington Academy and its supporters,—all liberal, and all tolerant, had their little prejudices, their favourite aversions.

But the history of the Academy is now coming to an end. In 1782, the difficulties arising from the insubordination of the students on the one hand, and a pressure of debt for building expenses on the other, were becoming formidable. To meet the latter evil a subscription was entered upon, headed by Sir Henry Hoghton, Mr. Tayleur of Shrewsbury, Mr. Hardman of Allerton, Mr. Bright of Bristol, and Mr. Newton of Norton, who each contributed £100, and a total amount of about £2500 is raised.

But the difficulties are still great, and the Academy is still declining.—Dr. Enfield seems to have felt that the house was falling, and was the first to raise the alarm. In December, 1782, he writes to Mr. (afterwards Serjeant) Heywood, and says that he sees "much reason for despondency.

^{*} It is of these Willoughbys of Parham that that beautiful "Lady Willoughby's Diary" tells us;—it is a strange mistake, however, in the accomplished authoress, to represent the Willoughbys as an Episcopalian family, especially since her own sympathies lie in the Presbyterian direction.

"Our number of students is only 17; of these only 8 are expected "to return next session. After the experience of many years, I find "myself confirmed in the opinion that it is impracticable in such a place "as ours, where youths from 14 to 18 years of age are placed in college "apartments, without any superior resident amongst them, and free from "all domestic restraints. Irregularities have from time to time unavoid-"ably arisen, which have at last, I am afraid, led the public to form a "decided judgment against the Academy." He goes on to state that students have lately been coming from those places only where the Academy is little known. Liverpool and Manchester supply very few, and one only of the trustees would send a son of his to the Academy. Dr. Enfield concludes by a suggestion that a "domestic plan of education" might be substituted, and implies that he would willingly undertake it. In January, 1783, Dr. Enfield repeated his distrust and his discomfort, in a memorial addressed to the trustees. He speaks of the hopes they had entertained, and of the disappointment which had resulted. The tutors, he says, had done every thing that could be done; but "an idle waste of "time, a coarse and vulgar familiarity, a disposition towards riot and mis-"chief, intemperance, and in some instances gaming, profaneness and "licentious manners, have found their way into a seminary intended to "train up youth in habits of sobriety and virtue." And then he repeats "his plan of a domestic education."

I find another memorial from Mr. Wakefield, which bears out in a great measure Dr. Enfield's complaints. The students are too young, and too ill-educated when they come,—they are thrown together in a large sequestered house,—there is no sufficient power of enforcing discipline,—the Academy is neither school nor college; it is without the supervision exercised in the one, and it wants the influence and authority of the other,—the students are treated as men, while they are but a set of wild and reckless boys.

In these statements there may have been some little exaggeration, but the evils were certainly great, and the applications from students very few. It is decided at a meeting of the trustees, that the Academy should be closed. For some months there seems to have been much discussion, and some warm discussion, with regard to the Academy. Some of the subscribers wish an amalgamation with Daventry. Others do not wish it closed at all, and in the September of 1785, they manage to carry resolutions that "the Academy shall not be dissolved," but that henceforth "the students be required to lodge in the houses of the tutors." But no resolution could revive the Academy. The students still dropped off, and the tutors had no heart left.

On 29th June, 1786, there was another full meeting of trustees, Thos. B. Bayley, Esq., in the chair, and a resolution, passed by a majority of 54 votes, for the last time decided the fate of the Warrington Academy.

It would now be of little interest to any one were I to unravel the tangle of conflicting interests, and contradictory schemes, which for nearly a year confused and divided the supporters of the Academy. A college at Manchester was at last established, and to this the Warrington trustees resolved to transfer their library and half the clear produce of the sale of the Academy buildings. The latter part of the gift was of no great value. The books still remain, and are still perhaps the finest part of the noble theological library of the Manchester college. Of that college itself-differ from its principles as, and how we like,—I need only say, that for seventy years it has continued with varying success to train up pious and enlightened ministers for that body of Christians, who founded the Warrington Academy. Established at Manchester, it then removed to York; it returned again to Manchester, and has now removed to London. Whatever may be its failings, it still retains the old Warrington characteristics of a freedom quite unshackled, a fearless daring in the search of truth, and a clear and penetrating glance into the deepest problems of theology.

Note.—As a sequel to the history of the Academy, I add the advertisement that appeared, when all was over, and nothing was left but to sell the deserted buildings:—

WARRINGTON ACADEMY.

TO BE SOLD BY AUCTION, upon the premises, on Wednesday, the 28th of February next, between the hours of three and five in the afternoon, subject to such conditions of sale as shall then and there be produced, together or in lots, if not sooner disposed of by private contract, of which timely notice will be given,

All the Buildings, together with the vacant Lands, belonging to the late Academy at Warrington, in the county palatine of

Lancaster, containing in the whole 4280 square yards or upwards. The buildings are large and commodious, in good repair, and are most excellently adapted for an academy or school for young ladies or gentlemen.—They consist of,

First, Two very good dwelling-houses, neatly fitted up, each 12 yards in front, three stories high, four rooms on a floor, cellared under, with convenient kitchens, yards and out-offices.

Second, A building, lately occupied for students' rooms, three stories high, about 23 yards in front, and 12 yards in depth.

Third, A building, three stories high, lately occupied as a common hall and library, with rooms over, in front 22 yards and a half.

There are two plots of vacant ground, the one containing 600, the other 1900 square yards.

For particulars enquire of Ellis Bent, Esq., and James Leyland, builder, in Warrington, with the latter of whom a plan is left, and who will shew the premises.

ON THE POPULATION OF LANCASHIRE AND CHESHIRE, AND ITS LOCAL DISTRIBUTION DURING THE FIFTY YEARS 1801-51.

By J. T. Danson, and T. A. Welton, Esqrs.

PART THIRD.

(READ 13TH JANUARY, 1859.)

RECAPITULATION.

WE shall the better grasp what remains of this subject if we first consider shortly the results obtained through the two parts of the Paper already published.

We have found the two counties to have in round numbers:—

An Area of 1,874,000 acres or 2,928 square miles, equal to about one-twentieth of England and Wales, and

A Population, in 1801, of 870,000 increase 185 per cent.

equal, in 1851, to about one-seventh of the population of England and Wales.

We separated the town population from the rest, under the rule that all aggregations of so many as 2,000 persons within an area of 180 acres (which allows about 200 square yards to each person, and agrees with such observations as we have been able to make of the towns of the North-Western district,) might be deemed "Towns." We thus found that the towns of Lancashire and Cheshire, in 1851, were 53 in number, and contained 1,610,000 persons, or about two-thirds of the whole population. This town population appears to have been placed upon about 67,000 acres of land, or about one twenty-eighth part of the entire area.

Then dividing the whole District into four regions, distinguished chiefly by the prevalent modes of employment, and marked with reference to the points of the compass, we have the following results:—

NORTHERN REGION.

Area..... 504,000 acres.

WESTERN.

EASTERN.

Area..... 232,000 acres.

Area..... 645,000 acres.

Population.. $\{1801....138,000 \}$ Increase $1851....563,000 \}$ 307 per cent.

Population.. $\{1801....512,000 \}$ Increase 203 per cent.

SOUTHERN.

Area..... 492,000 acres.

Population.. $\left\{ \begin{array}{ll} 1801...... & 143,000 \\ 1851...... & 249,000 \end{array} \right\}$ Increase 75 per cent.

A small map, in the last volume of our Transactions, shows the actual limits of these four regions.

The results elicited by a detailed examination of 204 of the parishes and townships not included in the towns, and selected as affording, together, a fair indication of the changes effected during the fifty years in the distribution of the *country* population, will be best gathered from a careful reading of Part II., in pages 14 to 24 of our Transactions, vol. X.

COUNTRY DISTRICTS.

We now return to the country districts as a whole. The figures about to be stated are all taken from the Tables appended to this part of the Paper; and these Tables also afford the means of readily extending the investigation, in further detail, to every Registration District in the two counties.

First throwing out the towns, with their population, and the 67,000 acres covered by them in 1851, we have remaining an area of 1,807,226 acres. Dividing this area according to the density of the population of its different parts, at the beginning and end of the half-century, under five heads, we obtain the following results:—

| In 1801. Acres. | | In 1851. Acres. |
|--|-----------|--------------------|
| CLASS. I.—Peopled by less than 100 per square mile 686,700 | _ | 410,706 |
| II.—By more than 100 and not 640,718 | 3 — | 631,956 |
| III.—By 200 to 300 216,507 | | 229,685 |
| IV.—By 300 to 500 170,335 | | 207,770 |
| V.—By more than 500 per square 32,966 | 010000000 | 327,109* |

^{*} The figures here stated were obtained by calculating the density of population in every parish or township for which the Census furnishes the necessary data. Every

Bearing in mind that the towns are here excluded, under the rule stated above, we may obtain some idea of the significance of these figures by considering what is the density, so far as we have yet the means of indicating it, due to a merely agricultural population. Estimates of high authority make the cultivated land in England and Wales about twenty-nine millions, out of a total area of thirty-six-and-a-half millions of acres: or rather less than four-fifths. In our two counties it may be safely taken to be above the average: or say, five-sixths. This would give us fifteen, out of eighteen hundred thousands of acres, cultivated.

The number of adult males (over 20 years of age) returned as employed in agriculture, in England and Wales, in 1851, gave an average, for the whole country, of 22 per square mile. In Lancashire the average was 29.6; in Cheshire 28.5. Taking 29. as a mean for the two counties, and deducting the land (300,000 acres) assumed to be uncultivated, we thus have, upon the cultivated land of Lancashire and Cheshire, an average of about 34.8 adult males per square mile, engaged in agriculture; and multiplying this number by five, to supply the women and children and other dependents of such a population, we have 174 per square mile, as the lowest presumable average population engaged in agriculture alone, in the cultivated districts of the two counties. But even in the most purely agricultural districts there are many persons not within the Registrar General's description as "employed in agriculture." And the lowest estimate we could form of the necessary population of a fully cultivated district would probably exceed 200 per square mile. We may therefore safely assume that of the districts above placed in class I., wherein no single township had so many inhabitants as 100 per square mile, a large proportion was composed of barren hills, woods, moors, marshy or boggy land, and sands skirting the seashore. But of this area

acre in the division was thus placed under one or other of the heads specified. In some instances, for want of more minute subdivisions, the densities were calculated on comparatively large areas: and we may reasonably conclude that local variations of importance have thus been merged in an average result, in accordance with which the whole area has necessarily been placed.

The area covered by towns in 1851, is, as above stated, disregarded; but it is proper to notice that according to the estimates upon which Tables III. and V. were founded, 49,439 of the 67,004 acres were not covered by towns in 1801, and would go to swell the extent of country districts of high density at that time.

The density of country population in England and Wales was in 1801 about 100 per square mile: and in 1851 had become about 160 per square mile. This number is the average of districts ranging from the scarcely inhabited moors to those densely peopled districts which almost reach the definition of "a town."

(as it was in 1801) about 270,000 acres, having passed into the next class during the fifty years, may be assumed to have been changed for the better at some period in the interval before us.

In class II. we find a total diminution, in the fifty years, of about 8,000 acres. This may, on the grounds already suggested, be termed the class of partial or proximate cultivation. No considerable part of the entire area in this class was so peopled as to justify our assuming the presence of cultivation up to the average of the cultivated districts of the two counties. Yet it is into this class, mainly, if not solely, that the 270,000 acres taken from class I. must have passed, between 1801 and 1851. Hence we may infer that about 270,000 + 8000 acres have been changed for the better in this class also, at some time during the period in view.

In class III. it is clear that we must recognise the presence of other modes of employment. Agriculture alone can scarcely be assumed to cause, in any considerable number of localities, the presence of 300 per square mile. Here, then, probably, we have the rural residences, not only of landowners, but of mercantile or manufacturing capitalists of various grades, and the usual clusters of smaller dwellings, collected near to, and having more or less reference to the domestic and stable service of, such residences. And also, probably, in a few instances, the factories and groups of adjacent cottages of late years so frequently planted along the course of favourable streams in the Eastern region. Here we observe that the increase of area is about 13,000 acres; but we have to bear in mind the 278,000 acres undoubtedly passed upwards out of the preceding class into this; and implying also a large transfer from this class to those above.

In class IV. there is a very palpable and considerable admixture, with the agricultural population, of persons not dependent upon any such occupation for their livelihood; and this must have extended to nearly every locality brought within the class. Here also we have an area covered, at the end of the fifty years, larger by 37,000 acres. We have yet, however, a total of some 230,000 acres taken from the classes I. II. and III. during the half-century, and not yet accounted for. And we find them in class V. "peopled by more than 500 per square mile:" a description applicable in 1801 to only 93,000, and in 1851 to 327,000 acres.

Our definition of a town excluding all districts having densities of

less than about 7,000 (7,111) per square mile, or even possessing that density, but not including 2,000 persons together, it will be observed that this class takes in all the districts not forming towns, and yet exceeding 500 per square mile. And it is one of the most remarkable of the facts elicited by this enquiry that, besides the 67,000 acres covered by our 53 towns, we thus had, in 1851, no less than 327,000 acres, or a total area nearly five times as great as all the towns, so peopled that its inhabitants may well be deemed to have possessed, in community of industrial occupation and interest, in neighbourhood, and in facility of communication, many of the characteristics of a town population.

Another view of the change here effected may be taken. It appeared by Table V., appended to the first section of this paper, that there was added to this (the country) part of the population of the two counties, in the fifty years, a total of 397,967 persons. And that they were, in effect, added almost entirely to the areas of *low* and of *high* density, leaving the medium nearly undisturbed in extent, is evident in the following figures:—

| | | PER CENT 1801. | AGE O | F AREA IN 1851. |
|------------|-----------------------------|-------------------|-------|--------------------|
| Population | s under 100 per square mile | . 38 | | 23 |
| " | 100 and not 200 | $35\frac{1}{2}$ | | 35 |
| ,, | over 200 | $26\frac{1}{2}$ | - | 42 |
| | | | | |
| | | 100 | | 100 |
| | | | | |

So much for the country districts as a whole. We may now regard them with reference to the division into four regions. Assuming that a density of 200 persons, or more, per square mile, indicates something more than agriculture, and its attendant arts, as means of employment, we take out every parish or township below that range, and then find the four regions comparing thus:—

| | Per cent | age of the | area of each region covered quare mile. (Exclusive o | d by 200 or more f Towns.) |
|---|---------------|------------|--|-------------------------------|
| | | 1801. | | 1851. |
| N | *********** | 3.5 | | 8.2 |
| E | ************* | 61.8 | ******* | 74.8 |
| W | ************* | 11.3 | | 47.0 |
| S | ******* | 13.0 | ****** | 34.8 |

Leaving the regions, and descending to the registration districts composing them, we find that, in 1801, the districts of the Northern Region varied, in their possession of so high a density, from 1.1 to 9.5 per cent. of

their area—those in the Eastern Region from 8.8 to 100 per cent.: that is to say entire registration districts were there up to, and beyond this density. In the four registration districts of the Western Region, (the Liverpool district being all town, and so excluded,) from nil (or no part of the registration district showing such a density,) to 43.3 per cent., and in those constituting the Southern Region from 3.6 to 38.1 per cent. In twelve out of the eighteen districts of the Eastern (or Manchester) Region, the proportions were above 78 per cent.

A very large portion of the Eastern Region—the seat of the Cotton manufacture—had therefore attained, even in 1801, a high density of population.

This circumstance helps us to account for the comparatively small extension (61.8 to 74.8) of the area of high densities in this region, just noticed. The influence of the Cotton manufacture was still, in 1851, almost confined to the Eastern and Western Regions. And the increase of population it has occasioned has consequently, in many cases, gone rather to swell populations already dense than to increase those of a sparer character. The following figures go far to prove this:—

| Parishes, etc., having in 1801 a Density. | 1801. PER | BONS. 1851. | Increase per cent. |
|---|-----------|----------------|-----------------------|
| Under 160 per square mile | 66,782 | 98,898 | 4 8 |
| 100 @ 200 ", ", " | 136,215 | 213,288 | 57 |
| 200 @ 300 ,, ,, | 82,533 | 145,826 | 77 |
| 300 @ 500 ,, ,, | 97,997 | 199,960 | 104 |
| 500 and upwards ,, | 98,831 | 222,353 | 125 |
| | | - | discoverage (control) |
| Total of Country Districts | 482,358 | 880,325 | 83 |
| | | | - |

Proceeding to another point of view—the proportions of *population* living in parishes and other similar districts, having a density of population of 200 or more persons per square mile were:—

| | | | | In 1801. | In 1851. | |
|--------|----------|--------|--------|----------|----------|-----------|
| In the | Northern | Region | | 12.3 | 24.3 | per cent. |
| 3.7 | Eastern | 22 | | 84.1 | 94.4 | ,, |
| 22 | Western | ,, | | 25.0 | 72.2 | " |
| ,, | Southern | >> | ****** | 28.2 | 62.0 | ,, |

Here, again, the Eastern Region gives a much higher proportion of population living in districts of high density than the others; and this at

both ends of the period in view. The increase in the Western and Southern Regions is also remarkable.

The increase in the fifty years 1801-51, in the four Regions, may be measured by several other methods: instances of some of the more obvious of which we add, by way of indicating some of the uses of the appended Tables.

If we take the *proportional extent of surface*, upon which at least 200 persons per square mile were *added to* the population existing in 1801, we get the following result—

In the Northern Region 1.5 per cent. of the area.

| ,, | Eastern | ,,, | 47.1 | ,, |
|----|----------|-----|------|------|
| ,, | Western | وي | 15.3 | ,, |
| ,, | Southern | ,, | 8.0 | . ,, |

In some registration districts every subdivision, and in others not a single portion, has received this amount of increase on population.

Again, if we take the proportion of population in 1801 which afterwards received such an increase, we find it amounted to

In the Northern Region, 3.4 per cent.

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,, Eastern ,, 68.5 ,,
,, Western ,, 24.8 ,,
,, Southern ,, 15.5 ,,
```

The proportion of surface upon which the increase of population in the fifty years amounted to at least 75 per cent. on the numbers enumerated in 1801, was—

In the Northern Region, 11.5 per cent.

```
,, Eastern ,, 49.0 ,,
,, Western ,, 48.0 ,,
,, Southern ,, 19.3 ,,
```

The districts upon the population of which such an increase afterwards took place included, in 1801,

In the Northern Region, 11.8 per cent. of the whole population.

```
,, Eastern ,, 61.0 ,,
,, Western ,, 52.1 ,,
,, Southern ,, 20.3 ,,
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Similar ratios for every registration district will be found in Table XVIII.

The proportions per cent. of the areas of the four Regions upon which the several densities mentioned have been added to the previously existing population, are as follow—

| 41111 | | REG | IONS. | |
|---------------------------|-----------|----------|----------|-----------|
| Additional Density. | Northern. | Eastern. | Western. | Southern. |
| Under 100 per square mile | 76.4 | 30.4 | $63 \ 8$ | 66.6 |
| 100 @ 200 ,, | 5.3 | 16.1 | 18.8 | 12.3 |
| 200 @ 300 ,, | 1.2 | 13.9 | 2.2 | 3.2 |
| 300 @ 500 ,, per gar | 0.3 | 16.9 | 8.4 | 3.3 |
| 500 and upwards " | 0.0 | 16.2 | 4.8 | 1.4 |
| Density decreased | 16.8 | 6.4 | 2.2 | 13.1 |

The proportions per cent. of the populations, in 1801, of the regions, upon which the several rates of increase and decrease stated have taken place, in the fifty years, are as follow—

| | | | HONS. | |
|----------------------------------|-----------|----------|----------|-----------|
| Rate of Increase or Decrease. | Northern. | Eastern. | Western. | Southern. |
| Decrease 16 per cent and upwards | 4.8 | 1.8 | 0.2 | 3.8 |
| " 15 " to Increase 14 per cent | 31.0 | 7.0 | 9.6 | 21.0 |
| Increase 15 @ 44 per cent | 37.5 | 13.5 | 10.2 | 31.0 |
| ,, 45 @ 74 ,, | 14.9 | 16.7 | 27.9 | 23.8 |
| ,, * 75 @ 104 , | 4.9 | 21.9 | 21.9 | 7.7 |
| ,, 105 @ 134 ,, | 1.1 | 14.5 | 6.5 | 3.9 |
| , 135 @ 164 , | 3.1 | 13.6 | 9.4 | 3.7 |
| " 165 per cent. and upwards | 2.7 | 11.0 | 14.3 | 5.1 |

Tables XV. and XVI. afford the means of extending the comparisons just made to each registration district.

In short, however the figures be regarded, we are struck by the wide and rapid increase of the populations comprised in the Eastern Region. The Western and Southern Regions rank next. The Northern Region, though moving in the same direction, halts a long way behind; and is evidently not under the more powerful of the influences operating upon the others. It should also be observed, as touching the higher rates of increase occurring in places already of high density, that the average densities of the parishes, &c., which increased or decreased in population at the several rates undermentioned, were as follow—

| | Density, 1801. | Density, 1851. |
|--|-------------------|------------------|
| Decrease 16 °/o and upwards | 119 per sq. mile. | 89 per sq. mile. |
| ", 15 $^{\circ}$ / $^{\circ}$ to Increase 14 $^{\circ}$ / $_{\circ}$ | 106 ,, | 109 ,, |
| Increase 15 @ 44 °/0 | 126 " | 163 ,, |
| ,, 45 @ 74 ,, | 183 " | 288 " |
| ,, 75 <u>@</u> 104 ,, | 260 ,, | 495 ,, |
| " 105 @ 134 " | 275 ,, | 605 ,, |
| ,, 135 @ 164 ,, | 285 ,, | 702 ,, |
| ,, 165 $^{\circ}$ / $_{\circ}$ and upwards | 205 ,, | 766 ,, |

The tables appended will afford materials for many similar comparisons of great *local* interest; but with which we must not now detain you.

Finally, in 1851, nearly four-fifths of the population of the two counties was found residing in parishes and other similar districts, which taken upon their entire area, had more than 200 persons per square mile—a most remarkable and pregnant fact.

A FURTHER REMARK AS TO THE TOWNS.

Thus far we have been speaking of the population of the country districts. With regard to the towns, little remains to be said. the tables already given, their rates of increase have been fully stated. With respect to their densities, the figures given in Table II. at the end of the first section of this paper must be received only as rough All that can be positively asserted is, that areas approximations. estimated as those given in that Table were, partly on the basis of known facts and partly upon reasonable probabilities, will, however inexact, represent better the real size of the towns, than the bounds (true only at a particular epoch, if even so) left us by our ancestors; and that it may be regarded as an established fact, that towns do not extend in area so rapidly as they increase in population. Nicer distinctions cannot be attempted without scientific definitions of the boundaries of towns, and censuses (taken simultaneously) based on such definitions—things hard of attainment, and not, as it seems to us, likely to be worth their inevitable cost. Our chief object in fixing areas for the towns was, to disengage them from the country districts, with a view to the separate treatment of the latter; and as any alterations which could be suggested of our method of effecting the separation would not appreciably affect the general results respecting country districts, that object may be said to be attained.

AS TO THE BIRTHPLACES OF THE POPULATION.

Having reviewed, however imperfectly, the amount and the modes of distribution of the population of the two counties at the beginning, and also at the end, of the half-century, 1801–51, and taken note of the more remarkable of the changes occurring during that period, the next question is, whence have come the 1,220,307 persons added to the populations of the towns, and the 397,967 more added to those of the country districts—a total addition of 1,618,274 persons?

The answer, owing to the imperfect manner in which the census of

birthplaces of the inhabitants of England and Wales in 1851 has been arranged, cannot be given accurately. That census, however, shows clearly the following results—

Those born in the counties proper (not registration counties) of Lancaster and Chester, and resident in England and Wales, numbered, in 1851, 2,065,178 persons. And of these there were—

Of these, the numbers living in Lancashire and Cheshire registration counties (or the North Western Division), amounted only to 1,928,579 persons, viz:—

Born in Living in Lancashire. Living in Cheshire.

Lancashire proper 1,509,793 44,111

Cheshire ,, 84,358 290,317

The remaining population of the Division, amounting to 562,248 persons, or 22.6 per cent of the total inhabitants, consisted of persons born beyond the limits of the *counties proper* of Lancaster and Chester.

The defect in the Census arrangement just adverted to, arises from the fact, that while people have been properly considered to belong to Lancashire, Cheshire, and other counties, according to the county proper in which they were born, the total results have been arranged under registration counties—divisions which usually do not correspond with the counties proper of the same name. So that, at first sight, those people of other counties, who live within the registration counties of Lancaster and Chester appear to have been all strangers (or immigrants), though, in fact, as portions of York, Stafford, and Flint shires are included in those registration counties, a portion of the seeming strangers are living where they were born. In like manner, the inhabitants of those portions of the true counties of Lancaster and Chester, which lie beyond the limits of the registration counties of the same names, seem to have emigrated, although they too are really living in the county of their birth. It is true that the explanations given enable us to perceive the real state of the case; but they leave us still without the means of obtaining the correct figures respecting immigration and emigration, and oblige us to have recourse to estimates. This difficulty might have been remedied by exhibiting, for each registration district extending into two or more counties, the birthplaces

of the inhabitants of the part in each county separately—a work which, as we conceive, would not have involved any extraordinary amount of labour or space, and would have materially added to the value of the census tables.

One general conclusion may, however, be very safely adopted, viz:—that the county of Lancaster has retained among its permanent inhabitants a larger proportion of those born within its bounds than any other county; and has also drawn very largely from the adjacent counties, and from Ireland and Scotland. It is also apparent that from those parts of England lying at a distance it has received comparatively small contributions to its population.

And although the county of Chester has not retained so large a portion of those born within its bounds, the same language would apply to the united counties as to the single county of Lancaster.

The figures just given, as to the numbers of persons born in Lancashire and Cheshire, and living in the registration counties of the same names, are, when corrected,* as follow:—

| Born in Counties proper of | Living in Lancashire proper. | Living in Cheshire proper. |
|-------------------------------|------------------------------|----------------------------|
| Lancashire | 1,514,566 | 44,238 |
| Cheshire | 54,626 | 323,274 |
| Born elsewhere | 462,044 | 88,213 |

From these figures the following ratios may be deduced—

Of 10,000 born in Lancashire and living in England and Wales, 9161 were living in Lancashire. Of 10,000 born in Cheshire and living in England and Wales, 7847 were living in Cheshire. Of 10,000 born in Lancashire and Cheshire and living in England and Wales, 9378 were living in Lancashire and Cheshire.

Of 10,000 living in Lancashire, 7,456 were born in Lancashire, 269 were born in Cheshire, and 2275 were born in other places.

Of 10,000 living in Cheshire, 7094 were born in Cheshire, 971 were born in Lancashire, and 1935 were born in other places.

^{*} The correction is hypothetical, and is based on the assumption, that when a district extends into two counties, the population of the part in one county contains a proportion of persons born in the other county equal to that of persons born in the county first mentioned found in the population of the other part—those born in neither being equally distributed.

Of 10,000 living in Lancashire and Cheshire, 7,787 were born in Lancashire and Cheshire, and 2,213 were born in other places.

Yorkshire is the county which ranks next after Lancashire in the power of retaining those born within its bounds:—

Of 10,000 born in Yorkshire, and living in England and Wales, 8,949 were living in Yorkshire.* Of 10,000 living in Yorkshire, 8,854 were born in Yorkshire, 1,146 were born elsewhere.

Thus, while Lancashire has retained 91.61 per cent. of those born within its bounds; and while the two counties of Lancaster and Chester have retained 93.78 per cent. of those born within their limits, Yorkshire has only been able to keep 89.49 per cent. of her native population.

On the other hand, while 22.13 per cent. of the inhabitants of Lancashire and Cheshire were immigrants, only 11.46 per cent of those enumerated in Yorkshire were born out of the county.

In brief, Lancashire and Cheshire had parted with 128,474 of their population, in return for whom they had received 550,257 from other places, while Yorkshire had lost 187,056, and only gained 206,023. The net gain to Lancashire and Cheshire, by excess of immigration over emigration was thus 421,783 persons—that to Yorkshire only 18,967 persons—whence it would, at first sight, appear that the busiest counties keep their inhabitants best; and that the least busy have the greatest tendency to send them abroad. And if numbers alone be regarded, this is no doubt true, to the extent the figures before us would indicate. But it will be remembered, as we have before had occasion to notice, that the motives to such gatherings of the people as are seen to have been taking place in Lancashire and Cheshire, during the last fifty years, are almost wholly of an industrial character. Openings for the profitable disposal of capital, skill, or labour invite the immigrants. But the very magnitude and importance of the interests thus created in the North Western district, and their dependence upon the maintenance of certain relations of exchange with other districtsas with foreign fields of production and of consumption—as well as the widely extended arrangements for the due transmission of goods and passengers incidental to these relations of exchange—have a powerful tendency to promote the migration, either temporary, as travellers, or permanent,

^{*} The county proper is here referred to.

North Western district. These, however, will, in nearly every instance, be persons possessed of more than an average amount of personal enterprise, intelligence and activity; and this not only on the ground that emigrants in general are better endowed in these respects, but on the further ground that, apart from exceptional inducements, the motives commonly effective to stimulate emigration, exist in our district only to a very limited extent. In other words, it is probable that the large stream of our immigration is composed mainly of unskilled labourers, and the much smaller stream outwards, of capitalists and specially skilled labourers.

It is true, also, with reference to the comparison with Yorkshire, that that county is twice as large as Lancashire and Cheshire combined, and that this must obscure to a certain extent the changes taking place in the distribution of population on its surface. If Yorkshire were divided into two parts of equal magnitude, considerable numbers would prove to have passed from one to the other. But however the line might be drawn, each half would also prove to have been unaffected by some of the changes which have influenced the other, and thus, the whole county. And it is not very probable that either half would be found to have retained so large a proportion of its native population or to have gained so largely by immigration as the combined counties of Lancaster and Chester have done. It is also to be borne in mind that the population of the latter two counties exceeds, by more than one-third, that of Yorkshire.

Although the estimates upon which the foregoing statements have been founded are doubtless sufficiently close when whole counties are under consideration, greater risk, as well as trouble, would attend their use with respect to single registration districts. Table XIX., intended to show the comparative attraction which the several registration districts have possessed for populations born at a distance, has therefore been framed as follows:—

A line drawn on the map at a distance of fifty miles from the nearest part of the North Western division will be found to include the whole, or a large part of, each of the counties of Cumberland, Westmoreland, York, Nottingham, Derby, Stafford, Salop, Flint, Denbigh, Montgomery, Merioneth, Caernarvon and Anglesey, and the Isle of Man. These counties will hereafter be spoken of as "within the fifty mile limit."

In framing the table referred to (XIX.) we were compelled to substitute for the Isle of Man the "Islands in the British Seas;" but as no doubt the chief part of the immigration from these islands into the north-western division has been from the Isle of Man, this is probably of little consequence.

In the first column, then, of Table XIX., will be found the number of the adult inhabitants of each registration district who were born in the county or counties proper in which the district is situate. In the second column appears the number of those who were born in the other counties comprised in the fifty mile circuit just described, including those born in "Wales, county not specified," it being assumed that these were chiefly from the nearer parts of Wales. In the third column appear those who were born in parts of England and Wales beyond the limit of fifty miles; and lastly, in column four are placed those who were born in Scotland, Ireland, and more distant parts. The remaining columns exhibit the proportions per cent. on total adult population belonging to each of these heads.

Now, from this table it appears that of the 1,351,830 inhabitants aged twenty years and upwards, enumerated in the North-western division in 1851, there were born—

| In the county or counties proper into which the registra- | |
|---|---------|
| tion district they reside in extends | 886,979 |
| In the other counties, &c., situate within the limit of | |
| about fifty miles | 219,132 |
| In the more distant parts of England and Wales | 58,333 |
| In Scotland, Ireland, Foreign parts, &c | 187,386 |

Of the second class a part are of course Lancashire people, enumerated in Cheshire districts, and vice versa. It is still evident, however, that the counties surrounding the division have largely contributed from their native populations, since 180,688 adults born within them, out of a total of 2,179,110 found in England and Wales, were inhabitants of the Northwestern division. After making full allowance for the effect of the inclusion of portions of the counties of York, Stafford, and Flint within the division, (in the formation of the registration districts) we find that more than $7\frac{1}{2}$ per cent. of the adult natives of the counties thus surrounding Lancashire and Cheshire had migrated within the limits of the North Western division.

Of those born in more distant parts of England and Wales, only one per cent. had come into Lancashire or Cheshire.

But of those born in Scotland, Ireland, the Colonies and Foreign parts, and resident in England and Wales, more than one-third were found in Lancashire and Cheshire. Of the Irish alone, nearly two-fifths were found there.

In order to afford to those who desire it more detailed information on this part of the subject, Table XX. has been framed, showing the numbers of adults born in each county and resident in England and Wales, and the portion thereof resident in the North-western division; and at the foot of this page is appended a table of the numbers born in Lancashire and Cheshire, but resident out of the division.

Returning to the consideration of Table XIX., we find it indicates very striking diversities as to the manner in which different districts have been peopled.

Disregarding the registration district of Clitheroe, which being situate in the two counties of Lancaster and York, is comparatively cut off by

| Inhabitants of the undermentioned Registration Counties, &c. | Adults born in Counties proper of Lancaster and Chester. |
|---|--|
| North-Western Division London York, West Riding* Derby* Stafford Salop* Warwick Westmoreland* Cumberland North Wales* York, East Riding Durham Gloucester Kent, extra Metropolitan Hants Nottingham Other parts of England and Wales England and Wales | 925,423 14,035 22,679 6851 9276 3363 3199 3236 2777 5035 1873 1765 1132 1149 1078 1041 11,274 7,015,186 |

^{*} This mark indicates that a portion of the counties proper of Lancaster and Chester extends into the registration county it is placed against.

them from the rest, especially those situate to the southward, and is thence chiefly peopled from within their bounds, we find in the district of Garstang (on the Wyre, about ten miles south of Lancaster), the highest proportion of inhabitants born in the county in which the registration district is situate, viz., 93.2 per cent., and in Wirral and Liverpool we find the lowest similar proportions, viz., 28.1 and 29.3 per cent. respectively.

Rather more than four per cent. of the adult inhabitants of Garstang come from the counties within the fifty mile limit, including Cheshire. The remaining 2.6 per cent. come from a greater distance, being the smallest proportion from beyond the fifty mile limit found in any registration district within the division.

Other districts show very different results. Seventy-one per cent. of the men and women of Wirral are immigrants; forty per cent. come from the neighbouring counties; and the remaining thirty-one per cent. from beyond. Seventy per cent. of the adult inhabitants of the Liverpool district are immigrants, twenty per cent. come from the neighbouring counties, eight and a half from those beyond, and above forty per cent. from Ireland, and other places out of England and Wales.

It is, of course, to be expected that, in the registration districts lying near the borders of the county or counties in which they are situate, the proportion of the inhabitants who have immigrated from neighbouring counties will be higher than in the interior. But the wide variation observed in the proportion from neighbouring places can hardly be attributed solely, or even mainly, to this cause. We have seen that where this proportion is highest, it is accompanied by a high proportion from a greater distance, thus showing that a powerful attraction in the place itself is operating in the movement.

The principal sources of the immigration from neighbouring counties into our North Western division may be thus described. In the north, we find in *Ulverston* a considerable number from Cumberland and Westmoreland, and in *Lancaster* an equal proportion from York and Westmoreland. But this immigration is not accompanied by any remarkable increase in population; and when taken in connexion with the known constant migration southwards from the whole of the northern region, we may safely assume that the immigrants fill the places of part of the native population who have already moved southwards towards the busier districts.

Preston contains immigrants from Yorkshire, Westmoreland, and Cumberland. Burnley, Blackburn, Haslingden, and Rochdale receive the majority of theirs from York. In Bolton, Bury, and Oldham immigrants from Cheshire become numerous, but they rank after those from York.

In Barton-on-Irwell, Salford, Manchester, and Chorlton immigrants from Cheshire are most numerous; those from York and Derby ranking next, in each instance.

In Ashton-under-Lyne a majority of the immigrants are from York, those from Derby ranking next. This district is partly in Cheshire.

In Stockport, also situate partly in Lancashire and partly in Cheshire, the greatest number of immigrants are from Derbyshire; and next to that county the principal contributions are from Yorkshire and Staffordshire.

In *Macclesfield*, the counties of Stafford, Lancaster, and Derby supply the greatest numbers of immigrants, in the order in which they are written. In *Nantwich*, the immigrants are mostly from Salop, Lancaster, and Stafford. In *Northwich* the greatest numbers are from Lancashire. In Chester, (*Great Boughton*) they come from Denbigh, Lancashire and Salop. This last district is situate partly in Flint.

Along the Mersey, Altrincham, Runcorn, and Prescot, each receive a larger number of immigrants from the opposite county than from any other.

The districts of Wirral, West Derby, and Liverpool, embracing the town and immediate environs of Liverpool, show the same result. But in Wirral, next to Lancashire, as suppliers of immigrants, come Flint, Salop, Denbigh, York and Cumberland. In West Derby, after Cheshire, come Cumberland, York, Denbigh, Flint, and Salop. And in Liverpool, after Cheshire, come York, Cumberland, Wales (county not specified), Islands in the British seas, Salop, Denbigh, Flint, Anglesey, Stafford, and Caernaryon.

We will now pass to a similar review of the numbers who come from greater distances, and thus testify less equivocally to the attractions possessed by the prosperous manufactures and commerce of the two counties.

Immigrants from England and Wales, beyond the fifty mile circle, constitute 4.3 per cent. of the inhabitants of the division. They are least

numerous in Garstang, where they do not reach one per cent. on the population, and are most numerous in the districts embracing the chief towns, as Liverpool and Manchester. In these they constitute from 5.1 to 9.3 per cent. of the whole adult population.

In Manchester, Salford, and Chorlton (taken collectively), they numbered 14,843 persons, aged twenty years and upwards, of whom 3,660 were from London; 1,466 from Warwickshire; 1,023 from Lincolnshire; 741 from Gloucestershire; 735 from Leicestershire; and smaller numbers from other places.

In Wirral, West Derby, and Liverpool (taken together), they numbered 23,163 adults, of whom 5,152 were from London; 1,914 from Devonshire; 1,478 from Warwickshire; 1,239 from Gloucestershire; 1,076 from Somersetshire; 930 from Lincolnshire; 893 from Kent (extra metropolitan); 854 from Cornwall; 825 from Northumberland; 764 from Hampshire; 737 from Worcestershire; and smaller numbers from other places.

The total number of adult inhabitants of the North Western Division, who were born beyond the limits of England, Wales, and the Islands in the British seas, was 187,386, being 13.9 per cent. on the whole number in 1851. Immigrants of this class are most numerous in the districts just mentioned, as comprising Liverpool and Manchester; in Prescot, Warrington, Ashton-under-Lyne, and Stockport, all in the Mersey valley. They are also numerous in Wigan, Preston, Macclesfield, Bolton, Great Boughton, (Chester) and Ormskirk.

In Liverpool, West Derby, and Wirral they amounted to 86,100 adults, of whom 68,322 were born in Ireland, 13,171 in Scotland, 3513 in Foreign parts, 1005 in British Colonies and East Indies, and 89 at Sea.

In Manchester, Salford, and Chorlton they numbered 47,874, of whom 40,241 were born in Ireland, 5521 in Scotland, 1577 in Foreign parts, 433 in British Colonies and East Indies, and 102 at Sea.

In Prescot, Warrington, Ashton-under-Lyne, and Stockport, the major part of this class of immigrants consisted also of Irish.

One of the inferences suggested by these figures is that the increase of population, by immigration, here in view, has been principally derived, by each district, from those in its own immediate vicinity, and that this has caused a further but less immigration from other and more distant districts

into those immediately surrounding the increasing place. Thus, the districts south of the Ribble increase more rapidly in population than those situate north of that river. A considerable part of their increase is supplied by immigration. A stream of population constantly passes into Preston from the north. This we may reasonably suppose to consist, to a large extent, of persons born in the districts of Fylde, Garstang, and Clitheroe, to whom such a movement is not only obviously profitable, but also comparatively easy. And we conclude that a portion of those who thus leave these districts to proceed southwards are replaced by immigrants into them from the more northern district of Lancaster, which, again, receives from the adjacent parts of Westmoreland and Yorkshire a sufficient number of immigrants to keep its population up to the current demand for labour. If this be the case, each district which is brought into a condition to offer and make known remarkable facilities for the profitable employment of labour, may be held to occasion, as it were, a succession of waves of population pressing after each other from a considerable distance, and gradually increasing in volume up to the point of attraction. Every place of considerable increase no doubt draws a portion from longer distances than those we have thus indicated, but it is conceived that the increase derived from places comparatively near is always much greater than that from a distance.

Those places which appear to form an exception to this rule are Liverpool and Manchester, and one or two others well situated for obtaining a portion of the Irish immigration. The attraction which Liverpool especially appears to possess for populations at a distance is very remarkable. It may however be worthy of notice, as a partial explanation of this fact, that the distant counties which contribute most to the population of Liverpool are many of them on the coast, and have peculiar facilities for communicating with a seaport town; and also, that persons sleeping on board vessels were included in the population returns of 1851, and numbered 4420 persons in Liverpool, besides 110 in the Wirral district. These, though undoubtedly, for the time, inhabitants of the locality, and always represented by their class, are for obvious reasons to be regarded somewhat apart.

OCCUPATIONS (GENERAL).

The occupations of the people of Lancashire and Cheshire are commonly

supposed, by superficial observers, to have immediate reference to hardly anything but the spinning and weaving of cotton; and so to be of a somewhat monotonous character. This, however, is far from the truth. The iron and copper mines and slate quarries of Furness, the salt works of the Weaver, the coal mines and the cotton factories of the Manchester district, and the docks and warehouses of Liverpool, exist among populations of as different composition and modes of life as can well be imagined.

The arrangement of population under eight classes of occupations, advocated by one of the writers of this paper,* applied to the registration counties of Lancashire and Cheshire, shows the following results, as compared with those for England and Wales:—

| | | | Per Cent. of Adult males belonging to each Class. | | | | |
|--------|---------|-----------------------|---|-----------|------------------|--|--|
| | | | In | In | In | | |
| | | Occupations. | Lancashire. | Cheshire. | England & Wales. | | |
| Class | I. | Agriculture | . 10.7 | 25.4 | 26.5 | | |
| 29 | II. | Mining | . 4.2 | 3.1 | 4.4 | | |
| 99 | III. | Manufacture | . 30.5 | 19.4 | 13.2 | | |
| ,, | IV. | Trades, Handicrafts . | . 27.1 | 27.0 | 29.9 | | |
| ,, | V. | Commerce, Conveyance | e 13.1 | 10.3 | 9.6 | | |
| 22 (1) | VI. | Menial | . 1.1 | 1.3 | 2.2 | | |
| ,, | VII. | Professional | . 1.5 | 1.7 | 2.0 | | |
| " | VIII. | Governmental, includ | - | | | | |
| | | ing Law | . 2.3 | 2.0 | 3.4 | | |
| Unclas | ssified | L | . 9.4 | 9.8 | 8.8 | | |

The classes numbered IV.,† VI., and VII. do not require a very close investigation in such a paper as the present. The general conclusion they point to is, that the existence of a larger labouring class than ordinary in Lancashire and Cheshire has depressed the *proportional* numbers of the wealthier and middle classes, and so has reduced the proportional numbers of the classes more particularly employed by them.

^{*} Mr. Welton, in a paper read before the Statistical Society of London in June, 1858.

⁺ The mixed character of manufacturing and trading which belongs to central places like Manchester may be illustrated by a comparative reference to the numbers of this class IV. in some other towns. In Blackburn, for instance, (a town possessing so large a ratio of manufacturers, and so small a proportion of tradesmen, that it must be regarded as little more than an aggregation of factories, and their dependant population), the proportions of men belonging to classes III. and IV. are respectively 51.2 and 29.3 per cent. In Chester, a place of an opposite character, the similar proportions are 7.1 and 43.7 per cent. If we imagine a town consisting, to the extent of ½ the of the whole, of a population like that of Blackburn, and the remaining ½ the resembling that of Chester, the proportion belonging to class III. would be 34.2 per cent., and that belonging to class IV. would be 34.8 per cent. Now, the actual proportions in Manchester are 34.1 and 34.3 per cent. respectively.

THE GOVERNMENT SERVICE.

Class VIII., including the Government Service both civil and military, together with local officers, and those belonging to the legal profession, does not assume any remarkable proportions in either of the two counties. In Liverpool it includes 3.6, and in Manchester 3.1 per cent. of the adult male population. In Chester it includes 7.9 per cent., but in Blackburn it falls to 1.3 per cent. of the adult males.* Of the remaining four classes, two, (the manufacturing and the commercial)—exceed, and two—the agricultural and mining—fall short (in Lancashire and Cheshire), of the average proportion in England and Wales.

The numbers of the agricultural and the mining classes are, however, only low in relation to the large numbers here found in the other classes. The following statement will show that, in Lancashire, they considerably exceed the average proportion on a given area; and are very near to it even in Cheshire.

| | | Number o | f Ad | ult Males 🎔 Sq. | Mile of each Class. |
|---------|------------------|--------------|------|-----------------|---------------------|
| Occu | pations. | In Lancashir | e. | In Cheshire. | In England & Wales. |
| CLASS I | Agriculture | . 29.6 | 1.80 | 28.5 | 22.0 |
| " II. | Mining | . 11.7 | | 3.4 | 3.6 |
| ,, III. | Manufacture | . 84.1 | | 21.7 | 11.0 |
| ", V. | Commerce, Convey | 7- | | | |
| | ance | . 36.3 | | 11.5 | 8.0 |

THE AGRICULTURAL CLASS.

This is, on the whole, larger than might be expected in a country containing so many moors and mosses as there are in Lancashire. Even in Cheshire there are considerable tracts of land not capable of cultivation, or giving but little employment to agricultural labour. It must be borne in mind, however, that in this North-western Division the land is more subdivided, or is held in smaller parcels, than in any other registration division. Thus of every 1000 holdings in this division, 868 appear to be under 100 acres. In the other divisions this number varies from 444 to 719 in the thousand. And it accords with an inference from these figures, that in the North-western Division there are also few large holdings: only one in three thousand exceeding 1000 acres. In the Eastern Division such holdings are thirty times as numerous.

^{*} The boroughs of Liverpool, Manchester (with Salford), Chester, and Blackburn, are here referred to.

If we regard the agricultural class more in detail, we also find that over a large portion of the district, and especially that portion of it which is most populous and most characteristic, the agricultural population had, in 1851, attained a considerable density.

There were in our Northern Region 17.3 per square mile.

| ,, | Eastern | ,, | 34.1 | ,, |
|----|----------|----|------|----|
| " | Western | ,, | 42.0 | ,, |
| 22 | Southern | ,, | 29.4 | 37 |

And if we consider that (excluding London and Middlesex) the largest proportion of agriculturists in any registration county is 33.9 men per square mile (in Bedfordshire); and that the Eastern and Western regions, where the proportion exceeds that in Bedford, occupy a tolerably compact area of 1370 square miles, or nearly three times that of Bedfordshire; we shall acquire a more distinct idea of the meaning of the figures before us. Further, were we to consolidate the tract in question by excluding Wirral on one side and Macclesfield on the other, and taking in the Warrington district, we should materially increase the average density. It would then reach 38.3 per square mile; and that over an area of twelve hundred square miles.

No facts are here before us which would justify an attempt to indicate the circumstances under which this ratio of agricultural population has thus been obtained, in the very heart of our district, usually regarded as pre-eminently, if not exclusively, favourable to manufactures and commerce. But the fact must be noticed as one of the most remarkable of those yet divulged by this enquiry.

THE MINING CLASS.

This is most numerous, both absolutely and in proportion to population, in the Eastern region—upon the coal measures. In this region, the area of which is only one-eighth less than that of the whole registration county of Durham (the most exclusively mining county of England), there was in 1851 a mining population even more dense than in that county, or 20.3 per square mile.

In the several regions the proportions were as follow:—

| Northern | Region | 1.7 per square mile | |
|----------|--------|---------------------|--|
| Eastern | ,, | 20.6 ,, | |
| Western | ,, [] | 6.0 ,, | |
| Southern | 2 ,, | 2.6 ,, | |

In the Northern Region five-sixths of the mining population were found in Furness or Ulverston district. They consisted, there, of 471 iron miners, 221 copper miners, 101 coal miners, 251 slate quarriers, and a few others.

From the Ken to the Ribble, there were but few of this class; but in the Eastern Region, south of the Ribble, we find a mining district of a character very different from that of Furness. Of 20,733 miners in the Eastern Region, 18,154 were coal miners, and 2414 stone quarriers. The coal miners were most numerous about Wigan, Bolton, and Oldham.

In the Western Region, there were 1422 coal miners in the Prescot district; and in the other districts miners of any description were but few.

In the Southern Region, there were 744 coal miners, of whom 199 were in Warrington, 317 in Congleton, and 220 in Great Boughton (Chester). Stone quarriers numbered 227: of whom 156 were in the Runcorn district. Salt makers (with whom salt dealers are returned), numbered 883 in the district of Northwich.

THE MANUFACTURING CLASS.

This is the great class of the North Western Division. In the four regions, it includes the following proportions of the population, aged twenty years and upwards.

| | | | Of both Sexes. | | Of the Adult Males. | |
|----------|-------|---------|----------------|----------|---------------------|----------|
| Northern | Regio | n | 10.0 p | er cent. | 11.2 pc | er cent. |
| Eastern | ,, | | 33.6 | ,, | 41.1 | ,, |
| Western | ,, | ******* | 4.0 | ,, | 7.5 | ,, |
| Southern | ,, | | 7.2 | ,, | 9,8 | ,, |

The numbers per square mile, in the several regions, were as follow—

| | Of 1 | ooth Sexes. | Of the Adult Males. |
|----------|--------|-------------|---------------------|
| Northern | Region | 8.4 | 4.7 |
| Eastern | ,, | 279.8 | 163.5 |
| Western | ,, | 34.9 | 31.0 |
| Southern | ,, | 12.4 | 8.4 |

The average proportion of adult males in this class, if taken for England and Wales, being only *eleven* per square mile, the significance of these numbers is at once apparent.

The general character of the manufactures of each of the four regions, however, demands some attention.

In the Northern Region the manufactures are principally textile: the cotton manufacture employing 1695 men; calico and cotton printing 631 men; the silk manufacture 208 men; that of flax and linen 126 men; and that of woollen cloth 124 men. Half the cotton manufacturers, and nearly all the cotton printers, were in the Clitheroe district; into the southern portion of which district the manufactures of the Eastern Region may be considered to extend. Also, in the Clitheroe district, 111 men were employed in making engines and machines. The silk and woollen manufactures are chiefly carried on in the district of Lancaster, and that of flax in Fylde.

In the Eastern Region, textile manufactures, of course, held the first place. The principal branches employed the following numbers of men—

| Cotton manufacture | 94,955 |
|---------------------------|--------|
| Calico, cotton printing | 6,119 |
| Calico, cotton dying | 2,085 |
| Fustian manufacture | 1,951 |
| Silk manufacture | 13,311 |
| Woollen Cloth manufacture | 5,018 |
| Flax, linen manufacture | 460 |
| Dyer, Scourer, Calenderer | 2557 |

The Silk manufacture predominated in one or two districts of the Eastern Region. It employed 4887 men in Macclesfield, and 1931 in Leigh. In these districts the numbers of cotton manufacturers (men) were 595 and 1523 respectively. Also, in the part of Oldham district, not included in the borough of the same name, which consists of Middleton and a small adjacent district, the silk manufacture employed 1438 men, while the cotton manufacture employed only 396.

In the district of Rochdale, the woollen manufacture held the first place: woollen cloth manufacturers numbering 2968 men, fullers 467 men, carpet and rug manufacturers 61 men, and "other workers in wool," chiefly flannel manufacturers, 470 men. These occupations, therefore, in the Rochdale district employed together 3966 men; while there were only 3561 cotton manufacturers (men) in the district.

In all the other districts of the Eastern Region, the cotton manufacture predominates. In the Manchester district, 1478 men and 2437 women manufactured silk in 1851; and the numbers of dyers, packers and pressers,

and fustian manufacturers are high in that district, as also in Salford and Chorlton. Cotton printers are most numerous in Bury, Haslingden and Blackburn districts. In Haslingden and Bury, as well as in Rochdale, there are woollen manufactures, though of not so great importance. After Manchester, there are most dyers in Bolton and Bury districts.

Though the manufacture of textile fabrics occupies the first place, the metallic and kindred manufactures are also present in this region. It is in fact one of its most surprising features, that it has large enough proportions of its inhabitants engaged in several departments of industry to render it remarkable for these alone, could its most famous occupation, the cotton manufacture, be kept out of view. We have seen that its agriculture and its mining, each employ denser populations than are so employed in the counties most famous for these pursuits. Its metal manufactures approach a similar standard. In Stafford, and in Warwick, 22.8 men per square mile are metal manufacturers. In the Eastern Region of Lancashire the similar proportion is 21.3 per square mile.

The metal workers of the Eastern Region are composed chiefly of the following classes—

| Engine and machine makers | 9950 | Men. |
|---------------------------|------|------|
| Iron manufacturers | 4635 | ,, |
| Nail manufacturers | 1102 | " |
| Boiler makers | 876 | " |

In the districts of Manchester, Salford, Chorlton, Stockport, Ashton-under-Lyne, Oldham, Bury, and Rochdale, including Manchester and the districts eastward of that place, there were returned 8099 engine and machine-makers, 2661 iron manufacturers, 522 boiler-makers, &c. In Bolton and Wigan districts there were 1063 iron manufacturers, 830 engine and machine-makers, 543 nail manufacturers, 182 boiler-makers, &c. In the remaining districts metal workers are less numerous. In Manchester there were no less than 113 file makers.

The remaining manufactures of the Eastern Region are of an extremely varied character. The total numbers employed, 8655 men and 1245 women, included

| Hatters | 3760 Men. |
|----------------------------|-----------|
| Manufacturers of Chemicals | 1148 |

| Printers | 1210 | Men. |
|---------------------|------|------|
| Engravers | 951 | 32 |
| Bookbinders | 216 | ,, |
| Paper Manufacturers | 502 | ,, |
| Glass Manufacturers | | ,, |

The hatters numbered 1117 men in Ashton-under-Lyne, 756 in Stockport, 609 in Oldham, and 344 in the Manchester district. The manufacture of chemicals employed 269 men in Manchester, 183 in Chorlton, 152 in Bury, 111 in Blackburn, and 109 in Bolton. Printers, bookbinders and engravers, were most numerous in Manchester, Chorlton, and Salford. Paper manufacturers numbered 164 men in Bolton, and 117 in Bury. The glass manufacturers of the Eastern Region were nearly all collected in the Manchester and Chorlton districts.

In the Western Region, textile manufactures employed but a small number of the inhabitants. In Ormskirk, the silk manufacture employed 323 men, and 308 women; and in Liverpool and West Derby there were a few cotton manufacturers.

The metallic manufactures of the Western Region are, however, of some importance. In Prescot, the watchmakers numbered 710, the toolmakers 173, and the engine and machine-makers 148 men. In Liverpool there were 738 watchmakers, 494 engine and machine-makers, 468 iron manufacturers, 242 boiler-makers, 145 brass-founders, &c. In West Derby there were 420 watchmakers, 412 engine and machine-makers, 484 iron manufacturers, and 141 boiler-makers. Watchmaking therefore employs a considerable number in each of these three districts—the aggregate number of watchmakers in them exceeding that in any district of similar area, excepting only that of Clerkenwell, in London.

The other manufactures of the Western Region are principally those of glass, (employing 615 men in Prescot), earthenware (employing 135 men in the same district), chemicals, (employing 234 men in Prescot, 120 in Liverpool, and 75 in West Derby), sugar refining, (employing 220 men in Liverpool), soap boiling, (employing 130 men in the same district), and books, including printing and bookbinding, (employing 453 men in Liverpool, and 186 in West Derby).

The manufactures of the Southern Region do not assume very important dimensions. Warrington and Altrincham participate in the cotton manu-

facture, and Congleton in the silk manufacture of the Eastern Region. In Warrington, 456 men, and 443 women were engaged in the cotton manufacture; and in Altrincham 400 men, and 311 women. In Congleton 865 men, and 1145 women manufactured silks.

The metallic manufactures of *Warrington*, though not extensive, are of a peculiar character. The number of file-makers was 242, that of wire-workers was 119, and that of engine and machine-makers was 126. The engine and machine-makers in Nantwich numbered 337 men. This district includes Crewe.

The other manufactures of this Region are not very important. In Warrington 162 glass manufacturers, and 235 manufacturers of chemicals, were returned. The shoe manufacture of North Staffordshire extends into the district of Nantwich. Here 538 men, and 347 women in excess of the ordinary or average proportional numbers engaged in that department of industry, indicate the presence of what may be termed a manufacture of these articles.

THE COMMERCIAL CLASS.

In the North-Western Division, this class included in 1851, a total of 82,186 men. The agricultural class, including a number scarcely greater, must undoubtedly be looked upon as of much less importance in an economical point of view.

On sub-dividing this class into (I.) all those connected with commerce in the ordinary sense of the term, (II.) those concerned in making and maintaining the means of inland conveyance, and in putting them into operation, and (III.) those similarly concerned about sea navigation, it is conceived that, each of these classes, being more simple than any they can be united to compose, may be considered separately with advantage, so as to afford an idea of the whole more intelligible than that commonly derived from a consideration of the total figures.

The proportions of the adult male population belonging to each of the Sections of this class in the several Regions were as follow:—

| | | SECTION A. Commercial. | section B. Inland Conveyance. | section C. Sea Navigation. |
|----------|--------|------------------------|-------------------------------|-------------------------------|
| Northern | Region | .7 ₩ cent. | 5.2 ₽ cent. | 2.2 ₽ cent. |
| Eastern | ,, | 1.8 ,, | 6.0 ,, | .3 " |
| Western | . ,, | 4.0 ,, | 8.6 ,, | 14.2 ,, |
| Southern | ,, ••• | 0.8 ,, | 8.6 ,, | 1.2 " |

The proportions per square mile in the several regions were—

| | | | | ction A. mmercial. | se Inland | ction B. Conveyance. | | section C. ea Navigation. |
|----------|--------|-------|------|--------------------|--------------|-------------------------|------|------------------------------|
| Northern | Region | 1 | 0.3 | ₽sq.mile. | 2.2 | ₽sq.mile. | 0.9 | ₩sq. mile. |
| Eastern | ,, | • • • | 7.3 | ,, | 23.8 | ,, | 1.3 | ,, |
| Western | ,, | | 16.4 | ,, | 35.4 | ,, | 58.2 | ,, |
| Southern | ,, | | 0.7 | ,, | 7.3 | 59 | 1.0 | ,, |

The first section, including merchants, bankers, agents, brokers, salesmen and clerks, attains the greatest magnitude in Liverpool and Manchester; and in those places is found to be more numerous in the suburbs than in the central district. Here, however, it will be remembered that the census had reference to the place at which each person returned had *slept* on the preceding night.

Thus, in the districts comprising Liverpool, this class forms 6.9 per cent. on the male adult population in Wirral, and 6.1 per cent. in West Derby; but only 3.4 per cent. in Liverpool district. And, in those including Manchester, it is 6.8 per cent. on male adult population in Chorlton, 4.4 per cent. in Salford, and only 3.2 per cent. in Manchester. This undoubtedly arises from, and serves to illustrate the effect of, returning persons under those districts in which they sleep, as distinguished from those in which they are employed.

In the other districts it forms a comparatively small fraction of the population, falling to mere insignificance in that of Garstang.

The section of inland conveyance includes a more regular proportion of population, generally amounting to from 3.0 to 7.4 per cent. on the total number of male adults present (or sleeping) in each district; attaining somewhat higher ratios in the large towns, and in localities where railway labourers or bargemen are numerous.

In Manchester, Salford, and Chorlton, this section (B.) includes from 9.1 to 10.4 per cent. on male adult population. In Liverpool the corresponding ratio is 9.9 per cent.; and in West Derby 8.3 per cent.

In Runcorn, and in Northwich, the ratios are respectively 15.7 and 11.2 per cent. In these districts, however, more than half the number of men belonging to the section are boat and bargemen. In Nantwich, including Crewe, where the numbers of railway labourers, and of coachmakers, are high, the ratio reaches 10.1 per cent.

This section includes the *smallest* proportions of population in the districts of Garstang, of Clitheroe, and of Blackburn.

The third section (sea navigation) includes, of course, a very small number of persons in districts not situate on the coast. And even on the coast its proportions do not attain any great magnitude, except at Liverpool.

But at this great seaport the section reaches a development unequalled in this country. In the three districts of Liverpool, West Derby, and Wirral, it includes 20,807 men; while in the nine metropolitan districts in which it includes fully three per cent. of the adult male population, it numbers only 18,636 men.

In the three Liverpool districts, it includes the following numbers of the several occupations.

| Shipowners | 139 | Men. |
|---------------------------|------|------|
| Shipwrights, Shipbuilders | 2043 | " |
| Others fitting ships | 615 | 12 |
| Rope makers | 582 | ,, |
| Sailcloth makers | 491 | " |
| Other Hemp manufacturers | 67 | ,, |
| Seamen | 8735 | ,, |
| Pilots | 190 | ,, |
| Dock labourers, &c | 7945 | ,, |
| | | |

The density of the population included in the commercial class is, in Liverpool, extreme. We must, however, remember the small extent of the district. Were the district large, the proportion would, of course, be much lower, the other facts remaining the same. The proportion of population belonging to the class is a truer guide to its relative predominance; and in the district of Liverpool, this rises to more than one-third of the adult males; and the average, in the whole North Western Division, is about one-eighth.

Much additional information as to the numbers belonging to each of the occupations will be readily obtained by a careful inspection of Tables XXI., XXII., and XXIII. appended to this part of the paper.

The Tables appended to these papers form a part only of those prepared in the first instance; but they embrace nearly everything of importance

elicited by a careful analysis of the Censuses of 1801, 1811, 1821, 1831, 1841 and 1851.

Many interesting facts are apparent on the face of these tables, to which no reference has been made in the text, which, we may observe, will be more justly regarded as indicating the value, and the use, of the tables, than as exhausting the materials they offer for examining in detail the growth and movement of the population in the Great North-Western Division of England and Wales, during the first half of the present Century. In short, our true work is in the Tables: what we have written upon them only pointing to and partially illustrating their practical uses.

Total Areas & Populations of those portions of each Registration District in which the density of population in 1801 was as stated, excluding Towns. TABLE XIV.-Country Districts.

| Þil | 9.1 | | 1 | 60 | 6 | 400004140 00000400 0 0 0 4 0 0 | n m |
|-----------------------|--------------------------|-------------|--------|---|-----------------|---|---------------------------------|
| DENSIT | Sq. Mil | Population. | 1851 | | 1959 | 7384 7979 4960 6855 2310 8011 8501 23334 28835 3000 11836 7578 4555 1524 1518 4655 1524 1524 1524 1524 1524 1524 1524 15 | 222353 |
| Y. HIGH | rds per | Popu | 1801 | 731 | 1500 | 3342 3126 2569 3832 1325 4192 4473 8123 13140 13140 1286 7288 900 5874 2005 16838 200 16838 1683 | 2133 |
| EXTRMLY. HIGH DENSITY | 500 upwards per Sq. Mile | Area. | Acres. | 200 | 1400 | 3457 3170 2780 4630 1357 4410 5384 7360 13883 1000 7060 2390 14010 2390 1490 1184 1184 | 1150 |
| NSITY. | | ation. | 1851 | 1225 | 2157 | 26664 1650 10035 17480 9951 13846 5704 45320 2064 1822 15234 636 174418 174418 19357 8957 8957 8957 1171 11118 | 14398 |
| VERY HIGH DENSITY. | 300-500 per Square Mile. | Population | 1801 | 1039 | 1880 | 8858 8858 1172 12478 1172 6239 10541 6249 7952 2236 11413 687 1625 572 11413 734 2879 11482 11482 674 11482 | 8180 |
| VERY I | 300-500 p | Area. | Acres. | 2130 | 3744 | 20135 20135 20135 20135 20135 11099 17512 10353 12900 3572 34210 2514 1290 2549 979 11385 11385 1146982 1146982 11412 5510 11444 11444 | 15063 |
| TY. | e Mile | ation. | 1851 | | 6156 | 2437 16358 4485 3835 6847 9307 2335 7377 11077 11077 2210 7783 3026 95151 16114 16114 24257 10627 999 2180 4257 10627 999 2180 4257 | 28405 |
| HIGH DENSITY | 200-300 per Square Mile | Population | 1801 | 639 1417 561 1790 | 4407 | 1714 729.7 4298 3407 4636 5066 1833 4808 3614 5374 1132 3175 4871 1709 5342 6342 6156 6756 6756 645 | 17533 |
| HIG | 200-300 1 | Area. | Acres. | 1571 4423 1774 4690 | 12458 | 4750 19626 11119 8273 111884 12997 5361 12596 8349 8349 8349 17762 17762 17762 17762 17762 17762 17762 17762 17762 17762 17762 17762 17762 17762 17762 17762 1891 1891 1891 1891 1891 1891 1891 189 | 46919 |
| SITY. | e Mile. | ation. | 1851 | 326° 6879 4624 8284 8284 | 31271 | 8398 11757 12884 9423 3692 293 293 293 293 2975 1941 1150 1150 1170 11706 1170 | 77006 |
| UM DENSITY. | 02 | Population | 1801 | 2116 4762 4208 5483 7478 | 24046 | 2410 11607 7826 6196 2333 384 2136 1363 743 743 94 8773 38002 12082 4940 4749 1781 23552 4487 7026 7507 6315 10343 10644 | 50615 |
| MEDIUM | 100-200 r | Avos | Acres. | 10622 22879 21983 28744 37223 | 121451 | 25168 6030 36953 25994 9753 1597 8940 4603 2498 2498 35742 25333 9214 42587 114504 117657 20332 33884 23785 49053 | 236230 640718 |
| rv. | Mile. | ation. | 1851 | 19638 111113 4554 3552 4894 | 43751 | 550 627 316 1779 1779 1779 1779 1779 1779 1779 17 | 27546 98898 |
| V DENSITY | | | 1801 | 11995 9406 2865 2774 4622 | 31662 | 395 300 104 1488 163 163 174 2580 6050 6050 6050 6050 6050 6050 6050 6 | 20244 |
| WOT | 0.100 per | A roa | Acres. | 121841 113426 33392 22459 71589 | 362707 | 3571 1980 730 11638 1279 1279 1279 14120 30200 30200 32141 2472 2484 37760 74857 1633 2823 59136 48179 | 185619 686700 |
| | REGISTRATION | DISTRICTS. | | Ulverston Lancaster Garstang. Fylde Clitheroe | Northern Region | Burnley Haslingden Blackburn Preston Chorley Wigan Leigh Bolton Bury Cochdale Oldham Manchester Salford Barton-upon-Irwell Chorlton Ashton-under-Lyne Stockport Macclesfield Eastern Region Ormskirk Prescot West Derby Wirral Western Region Warrington Runcorn Altrincham Congleton Northwich Northwich Northwich Northwich Shackburn Runcorn Altrincham Congleton Northwich Northwich Northwich Northwich | Southern Region Grand Totals |

Total Areas & Populations of those portions of each Registration District in which the Increase of Population in 1801-51 was as stated, excluding Towns. TABLE XV.-Country Districts.

| ENSITY, HIGH. | Mile. | tion. | 1851 | | : | 7979 14348 1932 8530 26836 32758 32345 12280 6750 6750 11836 8837 7824 5540 | 237304 | 635 8957 5621 589 | 15802 | 3719 1681 1164 2892 | 9456 | 200000 |
|----------------------------|----------------------|-------------|--------|--|-----------------|--|----------------|-----------------------------------|----------------|---|--|-------------|
| H H | # Sqr. | Population | 1801 | | : | 3126 4624 382 3562 3562 14136 114136 114864 52284 1587 1587 17408 2386 1419 | 91465 | 340 2215 1038 60 | 3653 | 1455 362 340 1155 | 3312 9456 | notos |
| ADDITNI. D EXTRMLY. | - 009 | Area. | Acres. | • • • • • | : | 3170 6990 1786 4747 550 16159 4213 2290 7060 7060 2711 15439 3580 | 98515 | 187 4546 5220 230 | 10183 | 2692 1417 828 1975 | 6912 | 110010 |
| SITY, | Mile. | Population. | 1851 | 1301 | 1301 | 2688 6170 8603 7177 7443 10413 12085 4802 43320 2438 1449 2547 2547 2547 2547 2547 2547 | 127523 | 14468 | 17007 | 1994 1570 4507 6454 | 6059 14525 6912 70639 160356 115610 | 11000001 |
| |) \$ Sqr. | Popul | 1801 | 483 | 483 | 1089 2830 4228 3420 3024 4410 2166 18077 1177 619 910 4913 | 58153 | 5345 | 5937 | 734 628 1356 3341 | 6059 | 20001 |
| ADDITNL. VERY | 300.500 | Area. | Acres. | 1641 | 1641 | 2645 4380 6707 5390 4220 7018 11033 5056 34210 5056 34210 5273 2773 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 1527 2770 2770 2770 2770 2770 2770 2770 2 | 102763 | 14400 | 17850 | 2362 1779 5877 6207 | 11885 16225 | (TOOT) |
| IAL IGH. | . Mile. | lation. | 1851 | 3818 | 3818 | 13510 7828 5532 13881 4015 6113 2781 1510 8579 1540 | 73421 | 1785 1000 | 2785 | 5836 282 282 2431 2102 555 | | _ |
| ADDITIONAL DENSITY HIGH | 200-300 \$ Sqr. | Population | 1801 | 1689 | 1689 | 2996 4805 2853 88381 25422 25432 3837 1740 674 1197 1798 1798 1798 1798 | 40080 | 862 | 1112 | 326 2995 92 1133 1193 173 | 5912 | _ |
| AD | 200-300 | Area. | Acres. | 2209 | 2209 | 16621 7837 7208 15032 3897 6610 2546 11998 11998 11998 2520 4204 2834 | 84132 | 2610 | 4610 | 1048 7522 538 3200 2284 1106 | 16012 29589 15698 50468 108433 110817 | 10011 |
| DENSITY, LING. | . Mile. | Population. | 1851 | 5905 748 1875 968 747 | 10243 | 627 1754 1754 1717 1717 1717 4026 2209 2209 2806 2816 2816 2816 2816 2816 2816 4415 | 51854 | 8917 3819 1942 2069 | 16747 | 1816 7153 4944 5784 1481 5384 3027 | 29589 | 100±00 |
| | 100-200 W Sqr. | Popu | 1801 | 2629 363 1291 561 349 | 5193 | 360 1052 4406 49329 49319 2745 11988 1598 1598 1639 1639 1639 1639 1639 | 30105 | 4436 1924 1011 787 | 8158 | 1005 4035 3042 2856 494 2874 1706 | i I | |
| ADDITNL. MIDD | 100-500 | Area. | Acres. | 19754 1470 2235 1774 1410 | 26641 | 1980 2797 10429 10429 18197 4829 3550 4146 1271 1271 1271 14120 4421 14120 4421 10646 | 97739 | 18615 10553 5451 5415 | 40034 | 3643 14572 8334 11643 4164 11244 5935 | 56468 75102 59535 173887 930306 993040 | 650348 |
| NAL LOW. | Mile. | ation. | 1851 | 18218 15265 9229 7842 11477 | 62131 | 1105 11157 11157 11157 11157 2935 2935 4050 1334 497 8091 12447 | 57632 | 18442 4786 4486 7817 | 35531 | 3352 4883 13921 6765 8528 17760 19893 | 75102 | leonos l |
| | er Sqr. | Population | 1801 | 12521 12548 6523 5865 9692 | 47149 | 55356 55356 55356 55356 55356 1833 34553 1093 1093 1093 1093 1093 | 46497 | 11389 3525 2892 5907 | 23773 | 2919 3627 10980 5334 5924 13518 14166 | | |
| ADDITIO DENSITY, | 0-100 per Sqr. Mile. | Area. | Acres. | 114839 126775 49506 36188 56046 | 383354 | 28274 28274 28274 28274 28266 5361 788 7788 1072 6745 61886 | 184742 | 67741 17645 17146 33553 | 136085 | 10678 22841 51661 30834 39558 85460 81971 | 323003 | _ |
| OF | | ation. | 1851 | 1264 1591 1296 3650 | 7801 | 1866 3022 696 696 6504 6504 6507 737 | 8831 | 504 | 504 | 2212 362 753 409 1078 2823 1903 | 9533 | _ |
| DECREASE (DENSITY. | 2 | Populati | | 1413 1833 1471 4264 | 8981 | 2389 3450 3873 8684 8684 8684 8684 8684 8684 8684 868 | 10683 | 542 | 545 | 2542 407 923 510 1231 3144 2185 | 10942 | - |
| DEC | | Area. | Acres. | 7990 9453 9838 56766 | 84047 | 6780 14994 3805 3805 1597 2500 2500 866 | 38853 | | 4679 | 8081 2297 4713 3122 9384 21313 14698 | 6360 | orrei |
| | REGISTRATION | DISTRICTS. | | Ulverston Lancaster Garstang Fylde Clitheroe | Northern Region | Hasilingden Blackburn Preston Chorley Wigan Leigh Bolton Bury Rochdale Oldham Manchester Salford Barton-on-Irwell Chorlton Ashton-under-Lyne Stockport | Eastern Region | Ormskirk Prescot West Derby | Western Region | Warrington Runcorn Altrincham Congleton Northwich Nantwich Careat Boughton. | Southern Region | Grand Total |

| | 5 and 7 ct. nerse. | ation. | 1821 | 1287 1301 2698 | 5286 | 5380 14664 3680 28828 3831 3831 5620 6750 6405 6405 | 114394 | 13696 6144 5264 | 25104 | 1994 2691 1164 4789 5727 37 1266 | 17668 | 162452 |
|---|--|-------------|--------|--|------------------|---|----------------|------------------------------------|-----------------|---|-----------------|---------------------|
| wns. | Increase 165 and upwards \$\Psi\$ ot. Very Rapid Increse | Population | 1801 | 338 483 .920 | 1741 | 1928 4728 778 778 8200 711 495 1587 6235 1808 | 30542 | 3680 1230 1269 | 6179 | 734 663 340 1448 1435 11 384 | 5015 | 43477 162452 |
| ing To | Incre upw Very I | Area. | Acres. | 7210 1641 5177 | 14028 | 2340 3863 .: 14860 .: 367 735 2290 2290 2211 20037 3340 | 62641 | 9188 7704 8587 | 25479 | 2362 3996 828 6415 14794 616 4594 | 33605 | 35753 |
| exclud | 5 to | ation. | 1851 | 4683 | 4683 | 8943 2958 1975 5955 16395 43320 6974 750 | 92288 | 9729 | 10101 | 3719 1570 1775 1499 505 | 9061 | 16193 |
| stated, | Increase 135 to 164 \$\psi\$ ct. Rapid Increase. | Population | 1801 | 1954 | 1954 | 3546 1246 1246 12394 18077 2719 300 1034 | 37541 | 3880 | 4046 | 1455 628 .: 753 622 211 | 3669 | 47210 116193 135753 |
| ere as | Incr 1(Rapi | Area. | Acres. | 16364 | 16364 | \$557 \$557 \$557 \$557 \$610 \$34210 \$1359 \$5081 \$508 | 66202 | 9758 ii20 | 10878 | 2692 1779 1224 4647 2096 | 12438 | 1 |
| 1-51 w | Rather acrease. | ation. | 1851 | 748 | 1495 | 11845 16466 6170 4867 6990 5577 17665 1510 2498 1449 3146 2991 3584 | 88854 | 4147 | 5932 | 1387 1910 2683 322 889 91 | 8220 | 47495 104501 105882 |
| in 180 | е П | Population | 1801 | 363 | 712 | 2561 2095 3109 3109 3109 3109 3109 3109 3109 3109 | 40167 | 1950 | 2812 | 664 424 909 1180 155 432 40 | 3804 | 47495 |
| lation | Increas & ct. Rapid | Area. | Acres. | 1470 | 2880 | 9338 18390 4380 13820 10434 1998 1998 1906 1527 1647 2521 8646 | 76435 | 2610 | 13922 | 2588 2162 2281 2281 5635 596 3162 821 | 17245 | |
| ndod fo | About Increase. | ation. | 1851 | 3983 | 5694 | 9317 2873 3888 10411 4025 5791 20415 1492 22156 8819 | 115646 | 9682 3819 3160 1352 | 18013 | 1477 3613 2408 2814 3059 1101 | 14472 | 80842 153825 110482 |
| rease (| 4 | Population. | 1801 | 948 | 3113 | 2593 1414 2096 5435 2056 2950 11434 11787 4897 91 | 60720 | 5062 1924 1753 707 | 9446 | 805 1867 1231 1443 1622 595 | 7563 | 80842 |
| s of inc | Increase dr ct. | Area. | Acres. | 6157 | 24383 | 6610 9463 4593 6550 7018 2950 5524 17265 2498 10195 8997 | 92220 | 26299 10553 9525 5756 | 52133 | 3247 5641 4556 5071 6992 4783 | 30290 | 92066 |
| he rate | to 74 rease. | tion. | 1851 | 6187 2152 1405 5151 | 14895 | 9554 833 833 833 833 833 15551 8813 1575 | 72978 | 13304 2411 1193 2210 | 19118 | 1108 4956 5789 1594 4694 8219 10931 | 37291 | 91382 144282 199026 |
| vhich t | Increase 45 to the design of the following t | Population, | 1801 | 3928 1398 932 3188 | 9446 | 5076 5989 524 524 5287 5287 5888 948 6095 896 | 46351 | 8300 1590 755 1407 | 12052 | 667 3172 3537 9 74 3048 5049 7086 | 23533 | 91382 |
| ict in ı | Increase 45 to 74 W ct. Moderate Increase | Area. | Acres. | 35840 11984 4173 14230 | 66227 | 7040 111054 1226 110755 110789 9170 2043 | 85158 | 45830 8088 4490 10868 | 69276 | 2103 13872 10940 5563 13127 23937 29988 | 99530 | 320191 |
| ı Distr | ct. | | 1851 | 9326 8690 4345 3077 5132 | 30570 | 2550 160 3815 8963 5434 2395 2676 1781 373 373 1854 8502 | 49087 | 1602 1386 2731 | 5719 | 2174 2312 11662 4868 4698 6122 7305 | 39141 | 96165 124517 320191 |
| stration | Increase 15 \$\psi\$ ct. to 44 \$\psi\$ ct. Slow Increase. | Population | 1801 | 7116 6885 3413 2440 3938 | 23792 | 4192 3242 3242 6719 4069 3019 1833 2189 1240 1625 1355 6608 | 37365 | 1222 1051 2136 | 4409 | 1837 1760 9076 3869 3612 4821 5624 | 30599 | 96165 |
| h Regi | Increato to Slow | Area. | Acres. | 51002 63503 23276 15961 23763 | 177505 | 17968 360 5240 5240 52681 10418 5361 5361 788 788 788 788 788 788 788 788 788 | 138734 | 5219 5270 13497 | 23986 | 5117 8019 39881 21317 10236 28259 34493 | 147322 | 65700 487547 |
| of eac | W ct. | ation. | 1851 | 929 5613 2248 2828 8738 | 20356 | 1822 25500 4130 4270 675 650 749 3221 | 19743 | 861 773 166 2457 | 4257 | 2490 1655 2272 1119 2611 7479 3718 | 21344 | |
| ortions | Decrease 15 \$\psi\$ ct. to Increase 14 \$\psi\$ ct. Almost Stationary. | Population. | 1801 | 866 5472 2208 2822 8310 | 19678 | 1818 2405 4381 4086 631 1266 713 | 19407 | 853 713 152 2424 | 4142 | 2505 1514 2231 1067 2542 7241 3647 | 20747 | 63974 |
| those p | Decre to Incr Almos | Area. | Acres. | 18020 57301 11220 16538 73278 | 176357 | 7540 20854 9285 1853 1853 2730 2500 | 70516 | 3102 4338 828 9048 | 17316 | 9845 9066 12545 6334 16246 45617 20960 | 120613 | 8855 384802 |
| ons of | | ation. | 1851 | 174 714 170 1257 | 2315 | 1379 80 80 696 293 604 150 | 3575 | 72 | 72 | 900 208 279 223 772 461 | 2893 | - 1 |
| opulati | Decrease 16 \$\psi\$ ct. and upwards. Sensible Decrease. | Population. | 1801 | 206 929 216 1708 | 3059 | 1865. 873 873 888 868 | 4890 | | 88 | 1119 93 320 379 2290 931 643 | 3775 | 11813 |
| and P | Decre and Sensib | Area. | Acres. | 1977 4297 1971 15771 | 24016 | 4866 500 3805 1597 2880 866 | 15138 | 451 | 451 | 3797 765 942 9194 3194 7071 5975 | 23938 | 63543 |
| Total Areas and Populations of those portions of each Registration District in which the rates of increase of population in 1801-51 were as stated, excluding Towns | REGISTRATION | DISTRICTS. | | Ulverston Lancaster Garstang Fylde Clitheroe | Northern Region. | Burnley Hashingden Blackburn Preston Chorley Wigan Leigh Bolton Bury Rochdale Oldham Manchester Salford. Barton-upon-Irwell Chorlton Ashton-under-Lyne Stockport Macclesfield | Eastern Region | Ormskirk Prescot West Derby Wirral | Western Region. | Warrington Runcorn Altrincham Congleton Northwich Nantwich Great Boughton | Southern Region | Grand Total |

TABLE XVII.-Country Districts.

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| DENSITY. | re Mile. | Population. | 1851 | 1301 839 1120 | 3260 | 22927 21301 30624 12185 10794 26550 18452 44181 43320 32345 16583 6750 24247 10849 48404 17628 5783 635 28425 5621 2548 2548 2548 2548 2548 2548 2548 2548 | 24599 |
|----------------|--------------------------|-------------|--------|--|-----------------|--|-----------------|
| HIGH | per Square | Popul | 1801 | 731 769 | 1983 | 10394 8961 14397 5782 5782 15081 18042 18042 18042 18042 18042 18042 18042 18042 18042 18043 1587 12341 12341 12341 12341 12341 12341 12341 12341 12341 12341 12341 12341 12341 12341 12341 12341 12341 12381 13381 | 11063 |
| EXTRMLY. | 500 - 1 | Area. | Acres. | 1641 500 900 | 3041 | 15358 18446 21605 10586 9041 22286 15737 25810 23761 34210 11369 6486 2290 21630 4896 17480 | 22393 |
| NSITY. | re Mile. | ation. | 1851 | 1225 748 1465 3666 2195 | 9299 | 6352 2876 2507 4007 10694 8544 8544 8554 11883 904 730 2253 1880 6627 4594 6627 1785 1785 1785 1785 1785 1785 1785 178 | 38588 |
| HIGH DENSITY | 300-500 per Square Mile. | Pepulation | 1801 | 1039 363 986 1481 1640 | 5509 | 4216 1250 1713 2477 77017 5396 1598 1598 618 955 4367 1256 988 1256 982 1256 1256 1256 1256 1256 1256 1256 125 | 21439 |
| VERY 1 | 300-500 1 | Area. | Acres. | 2130 1470 2627 6951 4020 | 17198 | 11210 3990 3809 6635 18845 19746 974 3763 2520 10246 9031 102262 10246 9031 4132 | 65332 |
| TY. | re Mile. | Population. | 1851 | 2110 1279 1213 1650 1948 | 8200 | 2033 787 2303 4743 4490 2761 2395 1558 1 | 29797 |
| HIGH DENSITY | 200-300 per Square Mile. | Popul | 1801 | 1264 1004 857 972 1444 | 5541 | 1853 4223 3942 3942 3942 3942 1575 1575 1575 1576 16801 16801 1862 1862 1862 1863 1863 1864 1865 1865 1865 1865 1865 1865 1865 1865 | 19212 |
| HIG | 200-300 | Area. | Acres | 5750 3275 2690 4647 4649 | 21011 | 8200 2340 5640 13715 11840 6894 5361 4176 1772 4570 12108 76616 6224 5035 5517 8608 27162 8008 27162 | 80999 |
| SITY. | re Mile. | ation. | 1851 | 15705 7604 8520 6020 7971 | 45820 | 2748 2748 25528 2638 2638 2638 2639 27483 27483 27483 27483 27483 27483 27483 27483 27483 27483 27483 27483 27483 27483 8796 8796 8796 8796 8796 8796 8796 8796 | 43687 |
| MEDIUM DENSITY | 100-200 per Square Mile. | Population. | 1801 | 9064 6341 6434 4837 7426 | 34102 | 2861 3233 5006 2361 463 384 713 713 713 1021 1021 1021 1021 14802 2677 2689 2749 2749 2749 2749 3575 2689 2749 2689 2749 2688 2749 2688 2749 2688 2749 2688 2749 2688 2749 2688 2749 2688 2749 2688 2749 2688 2749 2688 2749 2688 2749 2688 2749 2688 2749 2688 2749 2749 2749 2749 2749 2749 2749 2749 | 34677 |
| MEDI | 100-500 | Area. | Acres. | 73527 37.129 43652 29154 39541 | 223403 | 14088 | 195298 |
| TY. | e Mile. | Population. | 1851 | 5083 7746 658 11468 3760 | 18715 | 550 540 179 179 160 1912 1912 1913 1969 1069 1722 1764 5351 1764 5351 1764 5351 | 13419 |
| LOW DENSITY. | 0-100 per Square Mile. | Popul | 1801 | 3783 6616 639 1527 3795 | 16360 | 395 518 518 162 162 1449 11449 11449 11449 11449 11449 11449 11601 | 12314 |
| TO | 0-100 р | Area | Acres. | 53186 93961 11723 12225 66012 | 237107 | 3570 4219 1279 1279 1590 1590 1590 17381 17381 17381 1852 4849 8859 1805 1805 1805 1805 1805 1805 1805 1806 180 | 120959 |
| | REGISTRATION | DISTRICTS. | | Ulverston Lancaster Garstang. Fylde | Northern Region | Burnley Haslingden Blackburn Preston Chorley Wigan Leigh Bolton Bury Rochdale Oldham Manchester Salford Barton-upon-Irwell Chorlton Ashton-under-Lyne Stockport Macclesfield Eastern Region Ormskirk Prescot West Derby Wirral Western Region West Derby Wirral Western Region Narrington Runcorn Altrincham Congleton Northwich Nantwich | Southern Region |

TABLE XVIII.

Proportions of the Total Areas and Populations of the several Registration Districts in which the Densities and Amounts of Increase of Population were as stated. Towns Excluded.

| | Densit 200 and t | | Densit 200 and | | | eased 1801-51 apwards. | Increase Per Cent. 1801-51 75 & upwards. | | |
|--|--|---|--|--|---|--|--|--|--|
| REGISTRATION DISTRICTS. | Per C | ent. of | Per C | ent. of | Per C | ent of | Per Cent of | | |
| | Area. | Popln. 1801 | Area. | Popln. 1851 | Area. | Popln. 1801 | Area. | Popln. 1801 | |
| Ulverston Lancaster Garstang Fylde Clitheroe | 1.6 1.1 9.5 5.0 4.7 | 6.9 4.3 26.7 13.9 15.4 | 5.9 4.6 9.5 23.2 7.6 | 13.8 17.8 27.7 46.2 26 1 | 1.2 | 3.3 | 22.1 2.3 29.8 9.6 1.2 | 21.4 5.7 22.4 9.6 2.4 | |
| Northern Region | 3.5 | 12.3 | 8.2 | 24.3 | 1.5 | 3.4 | 11.5 | 11.8 | |
| Burnley Haslingden Blackburn Preston Chorley Wigan Leigh Bolton Bury Rochdale Oldham Manchester Salford Barton-upon-Irwell Chorlton Ashton-under-Lyne Stockport Macclesfield Eastern Region Ormskirk Prescot West Derby | 45.2 92.0 83.4 23.6 47.2 78.2 93.0 78.7 84.9 100.0 100.0 100.0 71.2 60.7 87.3 8.8 61.8 | 70.6 97.2 91.9 47.5 65.7 89.5 97.0 90.7 93.3 100.0 100.0 97.0 100.0 83.5 95.1 92.6 23.9 84.1 | 66.3 100.0 76.1 48.7 77.0 93.9 93.0 96.2 91.8 100.0 100.0 100.0 100.0 100.0 40.7 97.6 28.9 74.8 | 88.8 100.0 92.8 77.5 90.2 98.3 98.6 99.7 98.5 100.0 100.0 100.0 100.0 100.0 93.3 99.2 60.8 94.4 | 29.3 90.6 47.1 13.4 24.4 53.7 48.1 64.9 78.1 100.0 94.4 75.2 100.0 88.7 48.9 55.7 59.6 5.6 47.1 | 52.7 96.0 58.2 26.0 33.8 67.6 61.7 74.8 88.6 100.0 98.0 90.1 100.0 87.4 63.6 91.6 69.8 13.3 68.5 | 41.7 98.5 29.7 21.0 23.6 36.1 30.9 51.6 80.8 100.0 94.4 36.5 100.0 88.7 77.8 95.1 59.6 17.2 49.0 43.5 64.6 61.9 | 59 3 98,9 35,9 33,5 23.0 34.3 42.0 55,9 85.7 100.0 98.0 29 1 100.0 87.4 80.1 96.5 69.8 24.1 61.0 | |
| Wirrall | 11.3 | 25.0 | 47.0 | 72.2 | 15.3 | 24.8 | $\frac{31.3}{48.0}$ | $\frac{26,1}{52.1}$ | |
| Warrington Runcorn Altrincham Congleton Northwich Nantwich Great Boughton | 38.1 17.2 29.6 3.6 10.1 7.0 6.2 | 52.2 32.7 48.1 6.4 36.1 16.8 13.7 | 55.5 49.7 36.9 41.7 32.4 22.7 33.5 | 78.7 74.7 62.9 66.7 68.9 43.6 54.6 | 21.4 7.4 11.4 12.3 17.6 1.9 1.1 | 28.0 10.9 18.2 14.3 42.4 5.8 .9 | 26.8 26.1 12.0 31.9 33.6 12.8 11.9 | 31.8 27.8 17.0 38.0 28.5 13.0 6.7 | |
| Southern Region | 13.0 | 28.2 | 34.8 | 62.0 | 8.0 | 15.5 | 19.3 | 20.3 | |
| Grand Total | 26.5 | 57.9 | 42.3 | 79.9 | 20.2 | 45.2 | 30.5 | 45.4 | |

TABLE XIX.

| | | upwards | d 20 year , born in | rs and | Per Centage on Adult Population. | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|
| REGISTRATION DISTRICTS. | The County or Counties proper in which the Registration District is situate. | The other Counties within the fifty-mile limit, | Other parts of England and Wales. | Scotland, Ireland, Colonies and Foreign Parts. | Born in same County or Counties. | Born in other Counties within 50 mile limit. | Born in other parts of England and Wales. | Born in Scotland, Ireland, &c. | Born in all places beyond 50 mile limit. | |
| Ulverston | 11990 13950 6354 10165 11487 | 3394 3935 288 575 196 | 536 509 60 244 160 | 426 662 119 685 204 | 73.3 73.3 93.2 87.1 95.4 | 20.8 20.6 4.2 4.9 1.6 | 3.3 2.6 .9 2.1 1.3 | 2.6 3.5 1.7 5.9 1.7 | 5.9 6.1 2.6 8.0 3.0 | |
| Northern Region | 53946 | 8388 | 1509 | 2096 | 81.8 | 12.7 | 2.3 | 3.2 | 5.5 | |
| Burnley Haslingden Blackburn Preston Chorley Wigan Leigh Barton-upon-Irwell Bolton Bury Rochdale Oldham Ashton-under-Lyne† Manchester Salford Chorlton Stockport ‡ Macclesfield | 26665 22505 41142 42129 18084 34064 15874 13137 51425 41024 32472 36102 41378 65685 27741 34104 35935 23017 | 5097 2601 2832 3880 561 1553 710 2301 3536 3675 4311 7013 14485 24876 11062 21086 7090 8083 | 516 407 553 1374 213 704 204 486 1117 926 723 793 2039 6580 3155 5108 1460 1331 | 993 873 1999 4364 679 3541 625 852 4074 1829 1547 2172 6304 32007 6597 9270 4477 2447 | 80.2 85.3 88.4 81.4 92.5 85.5 91.1 78.3 85.4 86.4 83.3 78.4 64.4 50.8 57.1 49.1 73.4 66.0 | 15.3 9.9 6.1 7.5 2.9 3.9 4.1 13.7 5.9 7.7 11.0 15.2 22.6 19.3 22.8 30.3 14.5 23.2 | 1.5 1.5 1.2 2.7 1.1 1.8 1.2 2.9 1.9 2.0 1.8 1.7 3.2 5.1 6.5 7.3 3.0 3.8 | 3.0 3.3 4.3 8.4 3.5 8.8 3.6 5.1 6.8 3.9 4.7 9.8 13.6 13.3 9.1 7.0 | 4.5 4.8 5.5 11.1 4.6 10.6 4.8 8.0 8.7 5.9 5.7 6.4 13.0 29.9 20.1 20.6 12.1 10.8 | |
| Eastern Region | 602483 | 124752 | 27689 | 84650 | 71.7 | 14.9 | 3.3 | 10.1 | 13.4 | |
| Ormskirk Prescot West Derby Wirrall Liverpool Western Region | 8714 43993 127339 | 787 2376 21651 12452 31406 68672 | 309 995 7533 2879 12751 24467 | 1253 5082 17123 6942 62035 | 88.1 70.5 44.4 28.1 29.3 40.8 | 4.0 8.3 26.1 40.2 20.9 | 1.5 3.5 9.0 9.3 8.5 | 6.4 17.7 20.5 22.4 41.3 | 7.9 21.2 29.5 31.7 49.8 | |
| Warrington † Runcorn Altrincham Congleton Northwich Nantwich Great Boughton § | 10221 13582 14128 13811 15786 | 916 2350 3564 936 1358 3239 4957 | 585 346 706 562 323 645 1501 | 2957 477 958 502 706 658 1947 | 76.8 76.2 72.2 87.6 85.2 77.7 71.4 | 4.8 17.6 18.9 5.8 8.4 15.9 16.9 | 3.0 2.6 3.8 3.5 2.0 3.2 5.1 | 15.4 3.6 5.1 3.1 4.4 3.2 6.6 | 18.4 6.2 8.9 6.6 6.4 6.4 11.7 | |
| Southern Region | 103211 | 17320 | 4668 | 8205 | 77.4 | 13.0 | 3.5 | 6.1 | 9.6 | |
| Grand Totals | 886979 | 219132 | 58333 | 187386 | 65.6 | 16.2 | 4.3 | 13.9 | 18.2 | |

^{*} Includes part of Yorkshire; † includes part of Cheshire; ‡ includes part of Lancashire; | includes part of Staffordshire; | includes part of Flint.

TABLE XX.

| | | s aged 20 l upwards | - } | | | aged 20 upwards | • |
|---|---|------------------------------------|--|---|---|------------------------------------|-------------------------------------|
| COUNTIES PROPER, &c., WHERE BORN. | Living in North Western Division. | Living in England and Wales. | Per Cent. living in N.W. Division. | COUNTIES PROPER, &c., WHERE BORN. | Living in North Western Division. | Living in England and Wales. | Per Cent. living in N. W. Division. |
| Lancashire | 734060 191363 | 798480 216706 | 91.9 88.3 | Northampton Huntingdon Cambridge | 1230 242 483 | 129222 38211 98542 | 1.0 .6 .5 |
| Totals | 925423 | 1015186 | 91.2 | Norfolk | 1622 | 280045 | .6 |
| Cumberland | 13671 | 114490 | 11.9 | Suffolk Essex | 1660 1149 | 223750 231811 | .7 .5 |
| Westmorland Yorkshire | 8713 65103 | 40189 962373 | $\begin{array}{c c} 21.7 \\ 6.8 \end{array}$ | Middlesex extra Me- | 368 | 62574 | .6 |
| Nottingham | 3923 | 151095 | 2.6 | London | 12863 | 792483 | 1.6 |
| Derby | 19367 17244 | 178448 290636 | 10.9 5.9 | Hertford Bedford | 403 404 | 102091 68779 | .6 |
| Salop | 11658 1850 | 163038 44659 | 7.1 4.1 | Buckingham | 793 614 | 104257 108324 | .8 |
| Merioneth | 1135 | 25445 | 4.5 | Wilts | 873 | 177029 | .5 |
| Carnarvon | 2817 3294 | 47422 35733 | 5.9 9.2 | Somerset | 2264 3410 | 277205 350509 | 1.0 |
| Denbigh | 8371 11404 | 59608 40 9 09 | 14.0 27.9 | Cornwall | 1361 660 | 203952 114689 | .7 |
| Wales—County not | 7199 | 14943 | | Hants | 1754 | 225 393 | .8 |
| Stated | 4939 | 10122 | | Surrey extra Metro- | 597 | 112305 | .5 |
| Seas | 4939 | 10122 | 40.0 | Sussex Kent extra Metropolit'n | 891 2283 | 190064 285851 | .5 |
| Totals | 180688 | 2179110 | 8.3 | England, County not | | 166 | |
| Northumberland Durham Lincoln | 2293 2193 2795 | 160657 157219 228594 | 1.4 1.4 1.2 | Totals | 58333 | 6061897 | 1.0 |
| Rutland | 121 | 15649 | .8 | Scotland | 24618 | 104980 | 23.4 |
| Leicester | 2016 4439 | 136479 220491 | $\frac{1.5}{2.0}$ | Ireland | 154265 | 386588 | |
| Worcester | 2024 720 | 152390 81738 | 1.3 | East Indies) Foreign parts, British) | 2132 | 19208 | |
| Radnor | 96 | 19096 | .5 | subjects | 852 | 7580 | 11.2 |
| Brecknock Cardigan | 77 435 | 31909 45907 | .2 | Do. Foreign subjects | 5198 | 39947 | 13.0 |
| Pembroke | 702 260 | 58834 75690 | 1.2 | Born at Sea | 321 | 2101 | 15.3 |
| Carmarthen | 388 | 83249 | .3 | Totals | 187386 | 560404 | 33.5 |
| MonmouthGloucesterOxford | 343 2830 677 | 54245 253459 109039 | 1.1 .6 | Grand Totals | 1351830 | 9816597 | 13.8 |

N.B.—The North-Western Division contains parts of the Counties proper of Flint, Stafford and York. The per centages of natives of these counties living in that Division will therefore appear higher than they otherwise would.

TABLE XXI

Numbers of Men engaged in Mining and Agriculture, and Proportions of the Agricultural, Mining, Manufacturing, and Commercial Classes to Area, and of Miners and Agriculturists to Population.

| | | Males ged in | Prop W cent. Male Po engag | er Squai ged in | quare Mile, in | | | |
|--|---|---|---|--|--|--|--|---|
| REGISTRATION DISTRICTS. | Agriculture. | Mining. | Agriculture. | Mining. | Agriculture. | Mining. | Manufactre, | Commerce and Conveyance. |
| Ulverston Lancaster Garstang, Fylde Clitheroe | 3232 3285 2291 2500 2348 | 1103 91 4 | 38.5 35.7 64.4 44.6 38.7 | 13.1 1.0 .1 2.1 | 15.3 15.2 24.0 29.3 13.1 | 5.2 | 2.1 4.1 2.6 4.3 9.7 | 3.2 4.1 1.5 8.7 1.2 |
| Northern Region | 13 6 56 | 1327 | 41.6 | 4.0 | 17.3 | 1.7 | 4.7 | 3.4 |
| Burnley Haslingden Blackburn Preston Chorley Wigan Leigh Bolton Bury Rochdale Oldham Manchester Salford Barton-upon-Irwell Chorlton Ashton-under Lyne Stockport Macclesfield | 1938 1095 1781 3541 2566 2727 1483 2574 2032 1428 1196 1327 714 1771 1419 1570 1988 3209 | 1278 576 869 113 674 5373 703 3059 840 1304 1592 266 263 836 43 1548 645 751 | 11.8 8.5 7.9 14.4 26.3 13.7 17.4 8.8 8.9 7.5 5.3 2.2 3.2 22.2 4.4 5.2 8.8 19.1 | 7.8 4.5 3.8 .5 6.9 26.9 8.2 10.5 3.7 6.8 7.0 .4 1.2 10.5 .1 5.1 2.9 4.5 | 23.0 26.3 26.2 34.1 31.4 37.1 40.2 37.5 39.5 25.9 45.3 67.4 95.2 48.7 78.8 26.1 41.4 25.2 | 15.1 13.8 12.8 1.1 8.3 73.1 19.1 44.6 16.3 23.6 60.3 13.5 35.1 23.0 2.4 25.7 13.4 5.9 | 82.2 156.4 166.4 87.1 45.8 64.7 105.4 184.3 216.8 169.3 462.5 1112.6 1028.8 54.7 542.3 250.9 222.3 49.2 | 10.7 17.3 14.1 14.3 6.2 16.9 13.1 24.2 26.9 24.0 42.5 396.3 466.7 17.9 290.7 30.3 23.6 6.3 |
| Eastern Region | 34359 | 20733 | 8.6 | 5.2 | 34.1 | 20.6 | 163.5 | 32.4 |
| Ormskirk Prescot West Derby Liverpool Wirrall | 5392 2994 3353 1139 2341 | 117 1481 229 142 200 | 55.5 20.4 9.1 1.6 16.3 | 1.2 10.1 .6 .2 1.4 | 39.5 37.5 56.8 474.6 27.7 | .9 18.5 3.9 59.2 2.4 | 3.8 32 0 45.9 2004.6 7.3 | 6.0 14.3 172.1 10202.9 38.6 |
| Western Region | 15219 | 21 69 | 10.2 | 1.5 | 42.0 | 6.0 | 31.0 | 110.0 |
| Warrington Runcorn Altrincham Congleton Northwich Nantwich Great Boughton | 2158 2467 4334 2347 2271 4556 4466 | 206 171 21 435 907 13 241 | 22.7 36.0 46.9 29.6 28.1 44.7 31.7 | 2.2 2.5 .2 5.5 11.2 .1 1.7 | 46.3 36.2 37.7 28.4 22.2 24.1 27.0 | 4.4 2.5 .2 5.3 8.9 .1 1.5 | 44.3 4.2 7.1 15.3 2.5 5.7 4.0 | 17.6 21.2 5.0 6.2 10.5 5.7 8.7 |
| Southern Region | 22599 | 1994 | 34.3 | 3.0 | 29.4 | 2.6 | 8.4 | 9.0 |
| Grand Total | 85833 | 26223 | 13.2 | 4.0 | 29.3 | 9,0 | 63.6 | 28.1 |

TABLE XXII.

Numbers of Men and Women engaged in the several descriptions of Manufacture* and their Proportions to Area and Population.

| | Tex Manufa | xtile actures. | Metallic Manu- factures | | her actures. | | Propo | orcent. Ilt ation. | |
|---|--|--|---|--|---|---|---|--|--|
| REGISTRATION DISTRICTS. | Men. | Women. | Men. | Men. | Women. | Totals. | ₩ Square Mile. | & Cent. on Adult Population. | Males alone, & cent on Adult Male Population. |
| Ulverston Lancaster Garstang Fylde Clitheroe | 232 687 216 290 1557 | 216 732 248 394 1309 | 136 120 13 68 139 | 77 76 21 9 40 | 8 4 2 1 | 669 1619 500 761 3046 | 3.2 7.5 5.2 8.9 17.0 | 4.1 8.5 7.3 6.5 25.3 | 5.3 9.6 7.0 6.6 28.6 |
| Northern Region | 2982 | 2899 | 476 | 223 | 15 | 6595 | 8.4 | 10.0 | 11.2 |
| Burnley Haslingden Blackburn Preston Chorley Wigan Leigh Bolton Bury Rochdale Oldham Manchester Salford Barton-upon-Irwell Chorlton Ashton-under-Lyne Stockport Macclesfield Eastern Region Ormskirk | 6288 5938 10581 7981 3572 3303 3501 10133 9447 7963 9652 15799 5590 1695 6027 12594 8877 5905 | 5502 3465 8527 8112 3067 3847 4024 7909 7201 5707 8293 14390 4073 1827 3981 11893 8904 5333 116055 | 537 428 461 876 118 1348 336 2073 1070 1104 1831 4412 1475 211 2768 1242 940 235 | 99 156 289 175 44 106 51 435 646 277 727 1707 651 84 966 1267 853 122 | 13 4 21 19 7 12 1 60 57 39 177 266 80 19 58 276 130 6 | 12439 9991 19879 17163 6808 8616 7913 20610 18421 15090 20680 36574 11869 3836 13800 27272 19704 11601 | 147.6 239.6 291.9 165.5 83 4 117.2 214.4 300.4 357.7 273.4 783.3 1856.5 105.4 766.7 453.0 410.5 91.1 279.8 | 37.4 37.9 42.7 33.2 34.8 21.6 45.4 34.3 38.8 38.6 44.9 28.3 24.4 22.9 19.8 42.5 40.2 33.3 | 42.2 50.5 50.1 36.8 38.2 23.8 45.5 43.2 48.6 64.9 54.0 36.1 34.2 24.9 30.6 49.7 47.2 37.3 |
| Prescot West Derby | 53 439 | 126 127 | 1402 1798 | 1102 472 | 167 | 2850 | 35.7 | 9.9 | 17.4 |
| Liverpool | 657 119 | 461 12 | 2829 375 | 1325 121 | 30 1 51 5 | 2866 5423 632 | 48 6 2259.6 7.5 | $ \begin{array}{c c} 3.4 \\ 3.6 \\ 2.0 \end{array} $ | 7.3 6.6 4.3 |
| Western Region | 1669 | 1080 | 6485 | 3061 | 357 | 12652 | 34.9 | 4.0 | 7.5 |
| Warrington Runcorn Altrincham Congleton Northwich Nantwich Great Boughton | 798 6 713 1109 18 52 91 | 918 2 481 1216 21 39 39 | 775 100 49 128 209 454 408 | 491 182 55 29 25 +568 169 | 25 2 15 2 †369 12 | 3007 292 1313 2484 273 1482 719 | 64.5 4.3 11.4 30.1 2.7 7.8 4.4 | 15.6 2.2 7.0 15.4 1.7 7.3 2.5 | 21.7 4.2 8.8 16.0 3.1 10.5 4.7 |
| Southern Region | 2787 | 2716 | 2123 | 1519 | 425 | 9570 | 12.4 | 7.2 | 9.8 |
| Grand Total | 142284 | 122750 | 30549 | 13458 | 2042 | 311083 | 106.2 | 23.0 | 28.7 |

^{*} Disregarding Women engaged in Metallic Manufactures, in the Division only numbering 491.

⁺ Including 538 Men and 347 Women, the estimated excess of Shoemakers over ordinary numbers.

TABLE XXIII.

Numbers of Men Engaged about Commerce and Conveyance, and their Proportions to Area and Population.

| | | umbers o | | Proportions per Cent. of Adult Male Population. Proportion per Square | | | | | | |
|--|---|--|--|--|---|--|--|--|---|--|
| REGISTRATION DISTRICTS. | Commerce, | Inland Conveyance and Storage. | Sea Navigation. | Commerce. | Inland Conveyance and Storage. | Sea Navigation. | Commerce. | Inland Conveyance and Storage. | Sea Navigation. | |
| Ulverston Lancaster Garstang Fylde Clitheroe | 34 125 7 36 23 | 448 550 105 417 198 | 185 213 28 285 2 | .4 1.4 .2 .6 .4 | 5.3 6.0 3.0 7.4 3.3 | 2.2 2.3 .8 5.1 | .2 .6 .1 .4 | 2.1 2.5 1.1 4.9 1.1 | .9 1.0 .3 3.3 | |
| Northern Region | 225 | 1718 | 713 | .7 | 5.2 | 2.2 | .3 | 2.2 | .9 | |
| Burnley Haslingden Blackburn Preston Chorley Wigan Leigh Bolton Bury Rochdale Oldham Manchester Salford Barton-upon-Irwell Chorlton Ashton-under-Lyne Stockport Macclesfield Eastern Region | 99 106 141 214 49 165 39 254 201 176 177 1957 984 139 2177 227 165 124 | 773 601 777 1078 444 1035 435 1343 1126 1093 901 5509 2343 493 2992 1532 915 649 | 27 13 39 190 15 39 8 60 56 53 45 342 173 18 63 65 54 26 | .6 .8 .6 .9 .5 .8 .5 .9 .9 .9 .9 .8 3.2 4.4 1.7 6.8 .7 .7 | 4.7 4.6 3.4 4.4 4.5 5.2 5.1 4.6 4.9 5.7 4.0 9.1 10.4 6.2 9.4 5.0 4.0 3.9 | .2 .1 .2 .8 .2 .2 .1 .2 .3 .2 .3 .2 .6 .8 .2 .2 .2 .3 .2 .2 .3 .3 .2 .2 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 .3 | 1.2 2.5 2.1 2.1 .6 2.2 1.1 3.7 3.9 3.2 6.7 99.3 131.2 3.8 120.9 3.8 3.4 1.0 | 9.2 14.4 11.4 10.4 5.4 14.1 11.8 19.6 21.9 19.8 34.1 279.6 312.4 13.5 166.2 25.4 19.1 5.1 | 3 3 .6 1.8 .2 .5 .2 .9 1.1 1.0 1.7 17.4 23.1 .5 3.5 1.1 1.1 .2 | |
| Ormskirk Prescot West Derby Liverpool Wirrall | 48 135 2245 2519 | 656 833 3067 7273 995 | 114 174 4839 14695 1273 | .5 .9 6.1 3.4 6.9 | 6.8 5.7 8.3 9.9 6.9 | 1.2 1.2 13.1 20.1 8.9 | .4 1.7 38.1 1049.6 11.8 | 4.8 10.4 52.0 3030.4 11.7 | .8 2.2 82.0 6122.9 15.0 | |
| Western Region | 5943 | 12824 | 21095 | 4.0 | 8.6 | 14.2 | 16.4 | 35.4 | 58.2 | |
| Warrington Runcorn Altrincham Congleton Northwich Nautwich Great Boughton | 89 111 30 47 38 | 650 1080 452 474 903 1025 1049 | 61 279 12 11 125 17 256 | 1.2 1.3 1.2 .4 .6 .4 .9 | 6.8 15.7 4.9 6.0 11.2 10.1 7.4 | .6 4.1 .1 .1 1.5 .2 1.8 | 2.4 1.3 1.0 .4 .5 .2 .8 | 13.9 15.8 3.9 5.7 8.8 5.4 6.3 | 1.3 4.1 .1 .1 1.2 .1 1.5 | |
| Southern Region | - | 5633 | 761 | .8 | 8.6 | 1.2 | .7 | 7.3 | 1.0 | |
| Grand Total | 14117 | 44214 | 23855 | 2.2 | 6.8 | 3.7 | 4.8 | 15.1 | 8.1 | |

ON THE DIATOMACEÆ OF THE NEIGHBOURHOOD OF LIVERPOOL.

By Thomas Comber, Esq. (READ 16TH DECEMBER, 1858.)

In laying before the Society the following contribution to the Liverpool Flora, I have been influenced by a wish to increase, in some degree, the knowledge of the Natural History of the neighbourhood, towards which so much has been done by other Liverpool naturalists; and although I have confined myself to a single order I trust the subjoined list will be of some use in this respect. I am also not without hope that it will assist those whose researches have been extended over a wider field than my own, in their investigation into the geography of the order, at present in a very unsatisfactory state.

I have adopted the limits established by Dr. Dickenson in his Flora of Liverpool, extending to the north as far as Southport. In this district there are found as many as 257 described species of Diatomaceæ, affording representatives of 51 genera. Of these 120 are fresh water, 64 brackish, and 73 marine species: these last numbers are however only approximate, in consequence of many species being sometimes found in both fresh and brackish, and others in marine and brackish, localities. For instance, I have gathered Navicula Westii and Stauroneis salina, both generally considered altogether marine species, in a living state in a pool to which no sea water could possibly have got for at least eight months.

Those species usually found in Alpine situations, such as Navicula crassinervia, N. serians, some of the Pinnularia and Odontidia, Tabellaria flocculosa, and several of the Melosira and Orthosira, are absent; but this is only what would be expected: another deficiency for which I cannot account occurs in the allied genera of Podosphenia, Rhipidophora and Lichmophora, containing in all ten species, of which the only representative found in this neighbourhood is R. Dalmatica.

I have used Professor Smith's nomenclature, as being the best known, even in many instances where it is opposed to my own views. Only twenty of the species, discovered since the publication of the second volume of that work, are not described in his synopsis.

My best thanks are tendered to three members of the Microscopical Club of this town, Messrs. G. M. Browne, T. Sansom and L. Hardman, who have very greatly assisted me; how much, their initials, attached to the localities given on their authority, will shew. For the other localities and for the naming of all, I am myself answerable.

EPITHEMIA, Kützing.

- E. turgida, Sm.—Frequent. Well at Sefton, August, 1856, and July, 1857; Bidston marsh, October, 1856, and many other localities.
- E. Zebra, Kütz.—Bidston marsh, October, 1856.
- E. Argus, Sm.—Railway bridge at Spital, September, 1858, L. H.—Well in Brombro' wood, September, 1858.
- E. alpestris, Sm.—Well at Sefton, August, 1856, and July, 1857; railway bridge at Spital, April, 1857.
- E. Sorex, Kütz.—Sefton well, August, 1856, and July, 1857; Bidston marsh, August, 1858, &c.
- E. Westermanii, Sm.—Bidston marsh, October, 1856, and October, 1857—Birkdale marsh, G. M. B.
- E. rupestris, Sm.—Bridge at Spital, September, 1858, L. H., &c.
- E. gibba, Kütz.—Frequent. Bidston marsh, October, 1856, &c.
- E. ventricosa, Kütz.—Railway bridge, Highfield, L. H.

Eunotia, Ehrenberg.

E. Arcus, Sm.—Pit at Rock Ferry, June, 1856.

Cymbella, Agardh.

- C. Ehrenbergii, Kütz.—River Alt, near Sefton, July, 1857.
- C. cuspidata, Kütz.—Always occurs sparingly. Thornback pool, Crosby, September, 1856—Southport, June, 1857, G. M. B.
- C. maculata, Kütz.—Patrick's Well, Spital, March, 1857.
- C. Helvetica, Kütz.—Well at Sefton, July, 1857.
- ——— Var β.—Thornback pool, Crosby, September, 1856.

AMPHORA, Ehrenberg.

- A. ovalis, Kütz.—Frequent. Canal Bridge over R. Alt, &c.
- A. affinis, Kütz.—Not uncommon. Bidston Marsh, July, 1856, and October, 1857, &c.
- A. salina, Sm.—Bidston Marsh, July, 1856; Great Float, April, 1858.

 Cocconeis, Ehrenberg.
- C. Pediculus, Ehr.—Lock at Sefton, July, 1857; stream near Shotwick, Cheshire, June, 1858.
- C. Placentula, Ehr.—Very common; in fact in almost all fresh water gatherings.

- C. Thwaitesii, Sm.—Rock in Dingle, March, 1857.
- C. Scutellum, Ehr.—New Brighton, March, 1857, L. H.
- C. eccentrica, Donk.—New Brighton sands, September, 1858.

Coscinodiscus, Ehrenberg.

- C. radiatus, Ehr.—Common. New Brighton in several gatherings, &c.
- C. eccentricus, Ehr.—Common. New Brighton, &c.
- C. concinnus, Sm.—R. Fender, Bidston marsh, June, 1856; New Brighton, April, 1858—Southport sands, August, 1858, G. M. B.

Eupodiscus, Ehrenberg.

- E. fulvus, Sm.—Bidston marsh, October, 1857.
- E. crassus, Sm.—New Brighton—Southport sands, August, 1858, G. M. B.
- E. radiatus, Sm.—Southport marsh, June, 1857; New Brighton, April, 1858.
- E. Ralfsii, Sm.—Southport marsh, June, 1857; New Brighton, April, 1858.

 ACTINOCYCLUS, Ehrenberg.
- A. undulatus, Kütz.—Common. New Brighton, &c.
- A. duodenarius,
- A. sedenarius, New Brighton, April, 1858; Bidston marsh, Oct., 1857.
- A. octodenarius,

TRICERATIUM, Ehrenberg.

- T. Favus, Ehr.—New Brighton, April, 1858—Southport sands, August, 1858, G. M. B.
- T. undulatum, Ehr.—New Brighton, April, 1858—Southport sands, August, 1858, G. M. B.

CYCLOTELLA, Kützing.

- C. Kützingiana, Thw.—Aintree pit, June, 1857; Bidston marsh, Aug., 1858.

 ————— Var β.—Thornback pool, Crosby, September, 1856.
- C. operculata, Kütz.—R. Dee, near Queensferry, June, 1858.

CAMPYLODISCUS, Ehrenberg.

- C. costatus, Sm.—R. Alt, Sefton, July, 1857; well in Brombro' wood, May, 1857.
- C. spiralis, Sm.—Bidston marsh, October, 1856.
- C. cribrosus, Sm.—Bidston marsh, October, 1857.
- C. parvulus, Sm.—Head of Wallasey pool, May, 1857; great float, April, 1858.

SURIRELLA, Turp.

- S. biseriata, Bréb.—Hoylake, October, 1856, G. M. B.
- S. linearis, Sm.—Patrick's well, Spital, March, 1857; pit at Aintree, June, 1857.
- S. constricta, Sm.-Bidston marsh, October, 1857.

- S. lata, Sm.—New Brighton, September, 1858.
- S. splendida, Kütz.—Bidston marsh, October, 1856.
- S. striatula, Turp.—Frequent in brackish water. Bidston marsh, &c.
- S. Gemma, Ehr.—Primrose Hill, New Ferry, July, 1856; Bidston marsh, October, 1857.
- S. fastuosa. Ehr.—New Brighton, April, 1858.
- S. Craticula, Ehr.—Bidston marsh, October, 1856.
- S. ovalis, Bréb.-Frequent. Railway bridge, Spital, May, 1857, &c.
- S. panduriformis, Sm.—Rock at Storeton, March, 1857.
- S. ovata, Kütz.—Common in fresh water.
- S. salina, Sm.—Sands at Great Meols, May, 1857.
- S. pinnata, Sm.—Pit at Rock Ferry, March, 1857—Railway bridge, Highfield, L. H.
- S. angusta, Kütz.—Rock at Storeton, March, 1857.
- S. minuta, Bréb.—Lock at Sefton, July, 1857.
- S. Crumena, Bréb.—River Fender, June, 1856; near Wallasey pool, Seacombe, April, 1857; river Alt, July, 1857, &c.

TRYBLIONELLA, Smith.

- T. gracilis, Sm.—Not uncommon in brackish water. Frequently from Bidston marsh.
- ———— Var β.—Primrose hill, New Ferry, July, 1856.
- T. marginata, Sm.—Not uncommon in brackish water. Bidston marsh, October, 1857; Seacombe, April, 1858, &c.
- T. punctata, Sm.—Primrose hill, New Ferry, July, 1856.
- T. acuminata, Sm.—Frequent in brackish water. Bidston marsh, &c.

CYMATOPLEURA, Smith.

- C. Solea, Sm.—Bidston marsh, October, 1856, and October, 1857.
- C. apiculata, Sm.—Frequently met with, R. Alt, &c.
- C. elliptica, Sm.—Bidston marsh, October, 1857; R. Alt, July, 1857, &c. Nitzschia, Hassall.
- N. sigmoidea, Sm.—Not uncommon. R. Alt at Sefton, July, 1857, &c.
- N. Brebissonii, Sm.—Bidston marsh, July, 1856, and March, 1856.
- N. Sigma, Sm.—Not uncommon in brackish water. Bidston marsh, frequently.
- N. linearis, Sm.—Rather common. R. Alt, &c.
- N. angularis, Sm.—New Brighton, March, 1857, L. H.
- N. Amphioxys, Sm.—Frequent, though generally but few in a gathering. Moss from Rock Ferry, October, 1857.
- N. minutissima, Sm.—Patrick's well, Spital, March, 1857.

- N. vivax, Sm.—Bidston marsh, October, 1857—Birkdale marsh, June, 1857, G. M. B.
- N. virgata, Roper.—Sands at Great Meols, May, 1857; New Brighton, September, 1858.
- Sp. (*Epithemia marina*, Donk.) Sands at New Brighton, September, 1858.
- N. dubia, Sm,—Eastham marsh, Sept., 1858; Skew bridge, Bebington, May, 1856.
- N. bilobata, Sm.—Bidston marsh, October, 1857.
- N. plana, Sm.—Not uncommon. Bidston marsh, &c.
- N. birostrata, Sm.—Eastham Marsh, September, 1858.
- N, Closterium, Sm. Not uncommon. Southport sands, August, 1858; Eastham marsh, September, 1858; Bidston marsh on several occasions.
- N. Tænia, Sm.—Southport sands, August, 1858.

AMPHIPRORA, Ehzenberg.

- A. alata, Kütz.—Not uncommon in brackish marshes. Eastham marsh, September, 1858, &c.
- A. Ralfsii, Arnott.—New Brighton sands, September, 1858.
- A. paludosa, Sm.—Near Wallasey pool, Seacombe, April, 1857.
- A. duplex, Donk.—New Brighton sands, September, 1858.
- A. vitrea, Sm.—Eastham marsh, September, 1858; New Brighton sands, September, 1857.
- A. pusilla, Greg.—New Brighton sands, September, 1858.
- A. complexa, Greg.—Great Float, April, 1858.

Amphipleura, Kützing.

A. sigmoidea, Sm. — Great Float, April, 1858 — Canning Graving Dock, August, 1857, R. Daw.

NAVICULA, Bory.

- N. rhomboides, Ehr.—Bridge at Spital, May, 1857.
- N. lanceolota, Kütz.—Bidston marsh, May, 1856.
- N. cuspidata, Kütz.—R. Fender, Bidston marsh, June. 1856.
- N. Liber, Sm.—Great Float, April, 1858—Canning Graving Dock, August, 1857, R. Daw.
- N. firma, Kütz.—Not unfrequent, but always occurs sparingly. Rock in the Dingle, March, 1857, &c.
- N. astiva, Donk.—New Brighton, September, 1858.
- N. elliptica, Kütz.--Common.
- N. pygmaa, Kütz.—Seacombe, April, 1851; Primrose hill, New Ferry, July, 1856.

- N. Jennerii, Sm.-Bidston marsh, October, 1857; Seacombe, April, 1858; Southport sands, August, 1858, &c.
- N. Westii, Sm.—Seacombe, April, 1858.
- N. convexa, Sm.—New Brighton sands, September, 1858.
- N. elegans, Sm.—Pretty frequent in brackish water. Wallasey pool, Seacombe, April, 1856; Bidston and Eastham marshes, &c.
- N. palpebralis, Bréb.—New Brighton sands, September, 1858.
- N. Semen, Kütz.—R. Alt, near Sefton, July, 1857.
- N. affinis, Ehr.—Wall on Dingle shore, March, 1857; railway bridge, Spittal, May, 1857.
- N. inflata, Kütz.—R. Alt, near Sefton, July, 1857.
- N. gibberula, Kütz.—Frequent, but always much mixed with other diatoms.
- N. amphirynchus, Ehr.—R. Alt, near Sefton, July, 1857—Storeton, June, 1856, L. H.
- $Var \beta$.—Frequent, generally in brackish water.
- N. sphærophora, Kütz.—Hoylake, October, 1856, G. M. B.
- N. tumens, Sm.—Bidston marsh, July, 1856; October, 1856; and October, 1857.
- N. punctulata, Sm.—Primrose hill, New ferry, July, 1856; Eastham marsh, September, 1858.
- N. pusilla, Sm.—Sands at Great Meols, May, 1857; Bidston marsh, Oct., 1856, and October, 1857.
- N. tumida, Sm.—Moss at Rock Ferry, October, 1857.
- N. dicephala, Kütz.—Birkdale marsh, June, 1858, G. M. B.
- N. cryptocephala, Kütz. Bidston marsh, May, 1857; rock at Storeton, March, 1857, &c.
- N. lineata, Donk.—New Brighton sands, September, 1858.
- N. didyma, Kütz.—Frequent, Bidston marsh, October, 1857, &c.
- N. binodis, Ehr. Thornback pool, Crosby, September, 1856 Hoylake, October, 1856, G. M. B.
- N. lævissima, Kütz.—Thornback pool, Crosby, Sept., 1856 Southport, June, 1857, G. M. B.
- N. pectinalis, Bréb.—Sands at Great Meols, May, 1857; R. Fender, Bidston marsh, August, 1858; Dee marsh, near Queen's Ferry, June, 1858.
- N. retusa, Bréb.—New Brighton sands, September, 1858; Southport sands, August, 1858, G. M. B.
- N. Lyra, Ehr.—Seacombe, April, 1858; Southport sands, August, 1858.
- N. humerosa, Bréb.—Sands at Great Meols, May, 1857; New Brighton sands, September, 1858; Southport marsh, June, 1857.
- N. Trochus, Greg.—Hoylake, October, 1856, G. M. B.

- N. lacustre, Greg.—River Alt, Sefton, July, 1857.
- var. β , with var. α .
- N. quadrangularis, Greg,—New Brighton sands, April, 1858; Leasowe sands, October, 1858—Southport sands, August, 1858, G. M. B. Generally much elongated, with a curved median line.
- N. apiculata, Bréb.—Southport sands, August, 1858.

PINNULARIA, Ehrenberg.

- P. major, Sm.—Storeton, June, 1856, L. H.
- P. viridis, Sm.—Common. Patrick's well, Spital, &c.
- P. oblonga, Sm.—Well in Brombro' woods, May, 1857; well at Moreton, Cheshire, May, 1857.
- P. distans, Sm.—New Brighton sands, April and September, 1858.
- P. peregrina, Ehr.—Very common in brackish water.
- P. acuta, Sm.—Bidston marsh, October, 1856; Rock Ferry, March, 1857.
- P. directa, Sm.—New Brighton, October, 1858.
- P. radiosa, Sm.—Frequent. Bidston marsh, &c.
- P. gracilis, Ehr.—Common in Bidston marsh, and other brackish water localities.
- P. viridula, Sm.—Bidston marsh, July, 1856.
- P. Cyprinus, Ehr.—Common in many localities subject to marine influence.
- P. Johnsonii, Sm., var. β.—Bootle shore, December, 1858, G. M. B.
- P. stauroneiformis, Sm.—Hoylake, Oct., 1856, G. M. B. Highfield, L. H.
- P. mesolepta, Ehr.—Patrick's well, Spital, March, 1856; well at Moreton, Cheshire, May, 1857, &c.
- P. interrupta, Sm.—Storeton, June, 1856, L. H.
- October, 1856. —Storeton, June, 1856, L. H. Bidston marsh,
- P. borealis, Ehr.—Thornback pool, September, 1856; Moss at Rock Ferry, October, 1857.
- P. integra, Sm.—Not uncommon. Thornback pool, September, 1856; R. Alt, near Sefton, July, 1857, &c.

STAURONEIS, Ehrenberg.

- S. Phanicenteron, Ehr.—Not uncommon. Well in Brombro' woods, May, 1857, &c.
- S. gracilis, Ehr. Well at Moreton, May, 1857 Storeton, June, 1856, L. H.
- S. acuta, Sm.—Well in Brombro' woods, May, 1857.
- S. salina, Sm.—Seacombe, April, 1858.
- S. crucicula, Sm.—Wallasey pool, April, 1856; and April, 1857; Southport marsh, June, 1857.

- S. anceps, Ehr.—Not uncommon. Rock Ferry, March, 1857; well at Moreton, May, 1857, &c.
- S. linearis, Ehr.—Thornback pool, Crosby, September, 1856; Moreton well, May, 1857.
- S. pulchella, Sm.—New Brighton, September, 1858; Southport sands, August, 1858, G. M. B.
- var. (Navicula angulata, Bréb.) New Brighton sands, May, 1859.

PLEUROSIGMA, Smith.

- P. rigidum, Sm.—Southport sands, August, 1858, G. M. B.
- P. elongatum, Sm.—Bidston marsh, July, 1856, and October, 1857; Southport sands, August, 1858.
- P. intermedium, Sm.—Bootle, December, 1858, G. M. B.
- P. delicatulum, Sm.—Bidston marsh, May, 1856, L. H.
- P. strigosum, Sm.—New Brighton, April, 1858.
- P. angulatum, Sm.—Frequent. Bidston marsh, several times; Primrose hill, &c.
- P. Æstuarii, Sm.—Southport sands, August, 1858; New Brighton sands, September, 1858.
- P. obscurum, Sm.—Bidston marsh, May, 1856, L. H.
- P. Balticum, Sm.—Bidston marsh, October, 1857; Eastham marsh, September, 1858.
- P. Wansbeckii, Donk. (P. Balticum var. β . Sm.)—Southport sands, August, 1858.
- P. strigilis, Sm.—Bidston marsh, October, 1857.
- P. acuminatum, Sm.—Primrose hill, July, 1856; Bidston marsh, October, 1857.
- P. Fasciola, Sm.—Primrose hill, July, 1856; Bidston marsh, October, 1857; Eastham marsh, September, 1858, &c.
- P. macrum, Sm.—Bidston marsh, October, 1857.
- P. tenuissimum, Sm.—Wallasey pool, near Spital, April, 1858.
- P. littorale, Sm.—Primrose hill, July, 1856.
- P. Hippocampus, Sm.—Not uncommon. Bidston marsh; Ditton marsh, &c.
- P. attenuatum, Sm.—Brook near Shotwick, Cheshire, June, 1857.
- P. lacustre, Sm.—Not unfrequent. River Alt, near Sefton, July, 1857, &c.
- P. Spencerii, Sm.—Storeton, June, 1856, L. H.—River Fender, June, 1856; Canal Bridge, over River Alt, June, 1857.
- P. lanceolatum, Donk.—New Brighton sands, September, 1858.
- P. marinum Donk.—New Brighton sands, September, 1858.

TOXONIDEA, Donkin.

- T. Gregoriana, Donk.—Southport sands, August, 1858, G. M. B.—Stomach of Noctiluca, Southport, August, 1858, T. S.
- T. insignis, Donk.—Stomach of Noctiluca, Southport, August, 1858. T. S. Synedra, Ehrenberg.
- S. pulchella, Kütz. Wallasey pool, April, 1857; Southport marsh, June, 1857.
- S. minutissima, Kütz "Birkenhead, Cheshire, G. Shadbolt," Sm. Synops.
- S. radians, Sm.-Almost universally present in fresh water gatherings.
- S. Ulna, Ehr.—Common, though not so much so as the last.
- S. Oxyrynchus, Kütz.—Bidston marsh, October, 1857.
- S. obtusa, Sm.—Thornback pool, Sept., 1856; Moreton well, May, 1857.
- S. capitata, Ehr.—Hoylake, October, 1856, G. M. B.—Bidston marsh, October, 1857.
- S. tabulata, Kütz.—R. Fender, June, 1856; Dee marsh, near Queen's Ferry, June, 1858.
- S. affinis, Kütz.—Bidston marsh, October, 1857.
- S. Arcus, Kütz.—Dingle Bay, February, 1857—Rock Ferry slip, February, 1857, L. H.

COCCONEMA, Ehrenberg.

- C. lanceolatum, Ehr.—Frequently. Well in Brombro' woods, May, 1857, &c.
- C. cymbiforme, Ehr.—Frequent. Rock in Dingle, March, 1857.
- C. Cistula, Ehr.—Canal bridge, over R. Alt, June 1857.
- C. parvum, Sm.—Rock in Dingle, March, 1857.

Doryphora, Kützing.

D. Amphiceros, Kütz.—Sparingly in many localities subject to marine influence. New Brighton sands, September, 1858.

Gomphonema, Agardh.

- G. geminatum, Ag.—Patrick's well, March, 1856, L. H.
- G. constrictum, Ehr.—Frequent. Rock Ferry, March, 1857, &c.
- G. acuminatum, Ehr.—Frequent. Well at Moreton, May, 1857, &c.
- G. cristatum, Ralfs.—Canal bridge over R. Alt, June, 1857.
- G. dichotomum, Kütz.—Well at Moreton, May, 1857.
- G. tenellum, Sm.—Frequent. Rock Ferry, March, 1857, &c.
- G. capitatum, Ehr.—Var. y. Well at Moreton, May, 1857.
- G. olivaceum, Ehr.—Rock Ferry, March, 1857.
- G. intricatum, Kütz.—Rock in Dingle, March, 1857.
- G. curvatum, Kütz.—Frequent. Sefton lock, July, 1857, &c.

RHIPIDOPHORA, Kutzing.

R. Dalmatica, Kütz.—Dingle bay, February, 1857.

MERIDION, Agardh.

M. circulare, Ag. — Not unfrequent, but always much mixed with other diatoms. Near Wallasey pool, Seacombe, April, 1856.

BACILLARIA, Gmel.

- B. paradoxa, Gmel.—In most brackish localities. Bidston, Eastham, Ditton, and Dee marshes.
- B. cursoria, Donkin.*—Sands at New Brighton, September, 1858.

HIMANTIDIUM, Ehrenberg.

- H. pectinale, Kütz.-Frequent. Well at Storeton, March, 1857, &c.
- H. undulatum, Sm.—Well at Storeton, March, 1857.
- H. Soleirolii, Kütz.—Well at Storeton, March, 1857.
- H. gracile, Ehr.—Rather common. Bidston marsh, May, 1856; rock in Dingle, March, 1857, &c.

ODONTIDIUM, Kützing.

- O. mutabile, Sm.—Patrick's well, Spital, March, 1856; Skew bridge, Bebbington, May, 1857; railway bridge, Spital, May, 1857.
- O. parasiticum, Sm.—Bidston marsh, October, 1857; in Rivington Pike water supplied to the town.

DENTICULA, Kützing.

- D. obtusa, Kütz.—Canal bridge over R. Alt, June, 1857.
- D. sinuata, Sm.—Railway bridge, Spital, May, 1857; rock in Dingle, March, 1857; canal bridge over R. Alt, June, 1857.

Fragillaria, Lyngbye.

- F. capucina, Desm.—Rock Ferry, March, 1857; a curious variety from Bidston marsh, October, 1857.
- F. virescens, Ralfs.—Patrick's well, March, 1856.

EUCAMPIA, Ehrenberg.

E. zodiacus, Ehr.—Rock Ferry slip, July, 1856—Stomach of Noctiluca, Southport, August, 1858, T. S.

ACHNANTHES, Bory.

- A. longipes, Ag.—New Brighton, March, 1857, L. H. Canning Graving Dock, July, 1857, R. Daw.
- A. brevipes, Ag.—Common in the Mersey. Rock Ferry slip, July, 1856; Dingle Bay, February, 1857, &c.
- A. subsesslis, Kütz.—Bidston marsh, May, 1856; July, 1856; and Oct., 1857.

^{*} In my specimens the F.V. is always presented to the eye when in the living state. I consequently name it with a little doubt; it is certainly not B. paradoxa.

A. exilis, Kütz.—Rock in Dingle, March, 1857; railway bridge, Spital, May, 1857; canal bridge over R. Alt, June, 1857.

ACHNANTHIDIUM, Kützing.

- A. lanceolatum, Bréb.—Not uncommon. Rock near Storeton, March, 1857, &c.
- A. coarctatum, Bréb.—Skew bridge, Bebbington, May, 1857; moss from Rock Ferry, October, 1857.
- A. microcephalum, Kütz.—Canal bridge over R. Alt, June, 1857.

RHABDONEMA, Kützing.

- R. arcuatum, Kutz.—Woodside slip, May, 1857; New Brighton, February, 1857, L. H.
- R. minutum, Kütz.—Dingle bay, February, 1857—Rock Ferry slip, February, 1857, L. H.

STRIATELLA, Agardh.

S. unipunctata, Ag.—Primrose hill, New Ferry, July, 1856.

DIATOMA, Dec.

- D. vulgare, Bory.—Common. Canal near Aintree, June, 1858, &c.
- D. elongatum, Ag.—Common. Generally in brackish water.
- ——— Var. β.—Hoylake, October, 1856, G. M. B.

GRAMMATOPHORA, Ehrenberg.

- G. marina, Kütz.—New Brighton, February, 1857, L. H.—Woodside slip, May, 1857.
- G. serpentina, Kütz.—New Brighton, April, 1857.

Tabellaria, Ehrenberg.

T. fenestrata, Kütz.—Well opposite Bebbington Church, July, 1856.

BIDDULPHIA, Gray.

- B. aurita, Bréb.—R. Fender, June, 1856—Southport sands, August, 1858, G. M. B.
- B. Rhombus, Sm.—Common. New Brighton, frequently; Leasowe, Southport and Hoylake.
- B. Baileyii, Sm.—New Brighton, April and Oct., 1858—Stomach of Noctiluca, Southport, August, 1858, T. S.
- B. turgida, Sm.—Leasowe, September, 1858, G. M. B.
- B. granulata, Rop.—New Brighton, April, 1858—Leasowe, September, 1858, G. M. B.

Podosira, Ehrenberg.

- P. Montagnei, Kütz.—Common.—Bidston marsh, Southport, &c.
- P. maculata, Sm.—Not uncommon. New Brighton, &c.

MELOSIRA, Agardh.

- M. nummuloides, Kütz.—Common. R. Mersey, frequently; Dee marsh near Queensferry, June, 1858.
- M. Borrerii, Grev.—Bootle shore, December, 1858, G. M. B.
- M. varians, Ag.—Extremely common.
- M. Westii, Sm.-Bidston marsh, October, 1857.

ORTHOSIRA, Thwaites.

- O. marina, Sm.—New Brighton, several times.
- O. orichalcea, Sm.—Bidston marsh, October, 1856; well at Sefton, July, 1857; and June, 1858.

MASTOGLOIA, Thwaites.

- M. lanceolata, Thw.—Southport marsh, June, 1857; Birkdale marsh, June, 1857, G. M. B.
- M. Smithii, Thw.—Birkdale marsh, June, 1857, G. M. B.

Encyonema, Kützing.

E. prostratum, Ralfs.—Sefton lock, July, 1857; canal bridge, over R. Alt, June, 1857.

Colletonema, Brébisson.

- C. eximium, Thw.—Bidston marsh, October, 1857.
- C. vulgare, Thw.—Storeton well, March, 1857.
- C. neglectum, Thw.—R. Alt, near Sefton, July, 1857; R. Fender, Bidston marsh, August, 1858.

SCHIZONEMA, Agardh.

- S. cruciger, Sm.—Bidston marsh, May, 1856; New Brighton, February, 1857; Canning Graving Dock, August, 1858.
- S. helmintosum, Chauv.—Rock Ferry Slip, February, 1857, L. H.—Dingle Bay, February, 1857.
- S. Smithii, Agardh.—Rock Ferry Slip, February, 1857—New Brighton, March, 1857, L. H.
- S. Grevillii, Agardh.—New Brighton, March, 1857, L. H.; and October, 1856, G. M. B.

Homæocladia, Agardh.

- H. filiformis, Sm.—Canal bridge over R. Alt, June, 1857—Canal at Aintree, June, 1858, L. H.
- H. sigmoidea, Sm.—Pit at Aintree, June, 1857; Bidston marsh, October, 1857.

ASTERIONELLA, Hassall.

A. formosa, Hass.—In Rivington pike water supplied to the town.

ON THE ARMING OF LEVIES IN THE HUNDRED OF WIRRAL, IN THE COUNTY OF CHESTER, AND THE INTRODUCTION OF SMALL FIRE ARMS AS WEAPONS OF WAR IN PLACE OF BOWS AND ARROWS.

By Joseph Mayer, F.S.A., &c. (READ 4TH NOVEMBER, 1858.)

From the few accounts we have remaining respecting the arms used for defence by the inhabitants of this county prior to the reign of Queen Elizabeth, I am induced to lay before you a few remarks which I have drawn from documents in my possession, consisting of letters and orders sent by the privy council to the Lord Lieutenant, nobility and gentry of the county, respecting the musters and enrolment of the men who were liable to be called upon to do suit and service to the Queen, as well as to defend the country in times of trouble or threatened invasion, such as that of the Spanish Armada. The following letters will illustrate the style of armament of those who were called upon to defend the country: the first, which is dated the year before the arrival of the Armada, plainly shews the aggressive intentions of the King of Spain, long before the actual appearance of his fleet off the coast of England, which took place in July, 1588. To meet this danger it was ordered by the lords of Her Majesty's Privy Council, that all men capable of bearing arms should be assembled in the various counties and trained so as to be in readiness for the expected attack. The following is a copy of the return made in accordance with this order, for the parishes of the Hundred of Wirral, shewing the arms then in possession of those whose names are appended thereto.

"These (sic) furniture these men hadde the xxvj^{tie} daye of Marche, "Anno Salutis, 1587."

Tranmo^r Robt. Hulme, a byll, sworde, daggar, jacke and sallet. Ric' Cowes, a byll, sworde, daggar, jacke and sallet.

Poulton Raffe Hulme, bowe, arrowes, sworde, daggar, jacke and scull.

Widowe Dobbe, a byll, sworde, daggar, jacke, sallet.

Nesto Ric' Whitte, a bowe and haulf a sheaffe of arrowes.

George Hancoke, a bowe and haulf a sheaffe of arrowes.

Ric' Stanton, a byll and a scull.

Walishaye. Willm Byrde, a byll, jacke, and scull, sworde and daggar.

Widdowe Aunsdayle, a byll, jacke, sallett, sworde, daggar.

Rob^{te} Aunsdayle, a caliver, flaske, and tutche boxe, a sworde and daggar.

Thornton. Willim Parre, a byll and murrion.

Roger Berye, a caliver, flaske and tutchboxe, moulde, burganet, sworde and daggar.

John Guddicar, a byll.

Nicholas Harrisoune, a platte coate, murrion, bill, sworde and daggar.

Willm Lenarde, a byll, sallet, sworde and daggar.

His brother Thomas, a bowe and arrowes.

Geffrey Jumpe, a bill.

Robert Pemberton, a byll, sworde and daggar.

Hugh Bordema, a byll and jacke.

Ric' Burscoe, a byll, jacke, sworde and daggar.

John Rylande, jacke and byll and murrian.

Ric' Genion

Willim Whitladge Douson of arrowes.

Widowe Parre

Roudle Bewma, a byll, jacke, sworde, daggar and sallet.

James Gurleye, a caliver, flaske, tutchboxe, moulde, sworde, daggar, burganet.

John Bellin, a byll, sworde, daggar, and scull.

John Worall, a sworde and daggar.

John Lene, a byll.

John Dutton.

Leighton. Willim Cooke, a byll, murrian, jacke sworde and daggar.

Widowe Garrat, a bowe, haulfe sheaffe of arrowes, scull and byll.

John Coulton, a byll and murrian.

Willm Marrowe, a byll.

Thurseston. Willm Watmo, a bowe, vij arrowes, sworde and daggar.

Simonde Byrde, a byll, sworde and daggar.

Ric' Booll.

Widowe Benet, a pollaxe.

Erbye. Thomas Totty, a byll, sworde, daggar and murrion.

The next letter is headed with a description of the armature of a light horseman.

"For Lighte Horseme"

A geldinge wth stronge sadle and lethere harnesse, and for the ma a corslet furnished, northern staffe, a casse of pistols, a sworde and dagger, and evere pte of the armour to be good and sufficient.

After my verie hartie comendations havinge yesterday receaved at four of the clocke, in the afternone beinge the xjth daye of this October, lettres of expedicon from the righte honorable lo: levetenat of this coutie whereby it appeth that by the advertisement of a post verie latlye arrived the courte wth lettres of credite the Queene Maaties is informed that the Kinge of Spaine hath p'sentlye a great nomber uppon the seas yea and shippes, noe fewe in accompte have bene descried, wth a full determination to invade this Reale & arrive ether to Irelande Scotlande or both, or some other such place as shall be thought fittest for landinge & effectinge yt his intended violence & force upon us web by God's assistance and our indeavoure I hope shall easelie be suppsse. And for as much as my Lo: letenat by expsse direction from Her Matie hath straitlie chargede and comanded me in Sr John Savagé his absence on her highnesse behalf to answere the burden the Qneene maties laied uppon him for the service of this countie. And by his said Hon: letres · hath enjoyned me, that wth all expedicon after the recepte hereof I shoulde peede to the musters & traininge as well of the 600 selected footeme, as of the horseme, chargeable uppo the gent', soe as uppon the soden, the trainede me horsmen and others of this shieir may be in readinesse, to wth stande and impeache the landinge and foce of anie foren power, or enimie what soever. Therefore in her Maties name & by vertue of the saide Itres, I most straitly charge and comande you & everie of you, that you make redie all such me, horses, and furniture thereto belonginge as you are severallie charged for her Maties service; and the same to bring or sende to Northwyche uppon Mondaye being the vjt of November nexte there to be vewede & mustered & also delived over unto the Captaine yt shall take charge thereof for the answeringe of the psent service, wch hadde bene erre nowe, but in respecte of the dearth past and forbearinge of the harvest time, whereof fayll you not, as uppon y' aleadgeances you will answer. Dated at Cholmelye the xijth of October, Anno 1587."

This appeal to the nobility, gentry and yeomen of the Hundred was

responded to with alacrity; voluntary contributions to a large amount were sent in to the Treasury; and, amongst other contributors, I find recorded most of the catholic families, represented by the Venerable Rowland Stanley, of Hooton, Poole and Whitmore, Bunbury and Massey, who rallied round the standard of the Queen, and thus gave proof of their loyalty and patriotism. There was also a levy made on the property in the Hundred, which shows the poverty of that part of the county at this time.

"The rentes of all the townshippes wythin the hundreth of Warroll wythin ye pishes here after named.

| The pishe of Wallesye | xxvij ^{li} · |
|--|--|
| The pishe of Bydston & Forde | xxxviij ^{li} · |
| The pishe of Wytchurche (Wood Churche) | xlv ^{li.} xj ^{s.} |
| The pishe of Bevyngton | lj ^{li.} xix ^{s.} iiij ^{d.} |
| The pishe of Brunbrove | xxxv ^{li} · |
| The pishe of Estam | lxxxviiij ^{li.} vj ^{s.} viij ^{d.} |
| The pishe of Stoke | lij ^{li.} xviij ^{s.} viij ^{d.} |
| The pishe of Backforde | lxj ^{li.} ij ^{s.} ilij ^{d.} |
| The pishe of Shotweke | lxiij ^{li.} |
| The pishe of Burton | xxiiij ^{li.} |
| The pishe of Neston | lxxxix ^{li.} xiij ^{s.} iiij ^{d.} |
| The pishe of Heswalle | xxvij ^{li.} |
| The pishe of Thurstynton | xij ^{li.} vij ^{s.} vj ^{d.} |
| The pishe of West Kyrkebye | lxix ^{li.} viij ^{d.} |
| Over Churche, Upton | vyli. viis. |
| Stanlo | · va Ail |
| | |

suma totalis, seven hundreth poundes syxe shelynges and syxe pense.

We have for seven hundreth poundes seven score pounde to be levied, whyche ys foure Shelynges the pounde vj^{s.} vj^{d.} over xv^{d.} For xlij byll me after sene nobles a pyse the whoule sume fore score and xviij^{li.}

It' for xiiij bowe me after foure markes a ma cometh to xxxvijli. vjs. viijd (endorsed.)

"The muster bokes wth the renttall of all the landes wthin the hundreth of Worroll."

Although the Spanish Armada was totally destroyed by Admiral Howard and the storm in 1588, and the country had been restored to comparative quiet, it appears that the unsettled state of the rest of Europe

generally, required the armed forces of the English to be assembled at stated periods, in order to be in readiness against any sudden emergency; and here we have an order from Earl Derby relating to another muster which appears to have been deferred for some time in consequence of the great dearth that then existed.

"After my verie harty commendacons: this day I receyved ltres from there lls of her Ma^{ts} most honorable pyvy councell: whereby I ame (one her highnes behalf) charged psently and wthout all delay to put in redines all such forces whatsoever as have bene required since my commission of Lyve-tennancie: In respecte wherof thies are in her highnes name straightly to charge and commande you that psently uppon your receyte hereof you put in aredines such demi lances and lighte horses with there ryders armor and furniture, as by former directon from me you are chargeable wthall soe as the same may be shewed before me (uppon further warneing by my lres) or such as shalbe appoynted for that svice at any tyme after the 24th of thes psente sufficiente and meete for svice as her Ma^{ty} shalbe occaconede, to ymploy them: Not fayling as you will answere the neglecte thereof at your uttermoste pill.

Lathome my house this 10th of January, 1589.

Yor verie louing frende,

H. DERBY.

(Superscribed)

To my loving frende William Whitmore Esq. Dd.

Endorsed

Earle Derbie Tre to put in aredines a light horse."

Also a letter from the Deputy Lieutenant.

"After my hartie commendacons; whereas you have received late lies from the Lo: lieut: of thys county for the putting in psent redines and array such demi launce and light horse as you have bin formerly charged whall for her Maties service to be viewed, mustered, and trained at such places and dayes as should be prefyxed unto you. Therfore by vertue of late dyrectyons unto me in the same behalfe by the sayd Lo: Lieut: delivered, I requier and charge you in her Mats name that you send unto

Cotton heath the xith day of Februarye next by x of the clock such demi launces and lyght horse wth all thyre armor, weapons, ryders, and d. furniture, as well for your complem^t of xxvth demi launces as other wyse w^{ch} hath bin at any time heretofore sythence my Lo: lieutenneye assessed or rated uppon you where my Lo: wilbe present in pson to take muster. Letting you will that the rest of the gent' charged w^h you in that complem^t are lyke wyse written unto. And also that you put in a redines w^h armor and weapons your self, servants, tennts and followers, in such serviceable sort at any time after the xxvth of Febr' next you may be viewed and mustered, before the sayd Lo: lieut: not fayling hereof as you will answere. Cholmundley thys xxvith of January 1589. I bid you hartely Farewell.

Your verey loving

Friend,

HUGH CHOLMUDELY.

W. Whitmore ar.

(Superscribed)

To my verye lovinge frende Willm Whitmoore Esquier, dd'."

Although I do not find a list of the arms ordered to be shewn at Cotton heath on the eleventh of February, there is shortly afterwards another muster as shewn by the following document.

"This vewe was taken xx of May, (1590)."

Walisaye. In pmis Willim Byrde, a sallett, scull, a byll & a hake.

Item Rob^t Ansdall, a caliv^r, a jacke and sworde dacke.

Item a Widowe Ansdayll, a jacke sallet.

Tranmo Ric' Cowes, a jacke, salet, and a byll.

Rob^t Hulme, a bylle salett, chake, sword & dagge.

Poulto Raffe Hulme, sworde, daggar & byll.

Lauslin. Widowe Dobbe, byll and jake.

Nesto. Ric' White, a bowe. Ric' Stanton, a scull.

Thurst' Willim Whitmo a sworde & daggar.

Ri' Pickode, a bowe.

John Byrde, a byll and a sallet.
Willm Hande, a byll & sallet.
Rich' Ball, a sworde and daggar.

Erbye.
Thornto

Harrye Totty, a sworde & daggar. Roger Berye, a sword & daggar.

Nich Harrison, a byll, sworde & daggar. Thom Lenarde, a byll, sworde & daggar.

Hughe Bordema, a byll and bowe.

Thom: Rylande, a chake and byll.

Willim Whitledge, a sword & daggar.

Willim Bellin, a scull.

John Worall, a sworde & daggar.

Leighto Willm Cocke, a byll, sworde & daggar.

Widowe Garatt, a byll, bowe & scull.

Ric' Burscove, a sworde, dagger & a jacke.

Roule Bewma, a byll and jacke."

It will be observed how loosely these equipments must have been carried out, and how very irregularly armed the men were, so that at the muster ground they had to be drafted into companies of bowmen, billmen, &c., according to the kind of weapon they possessed, to enable them to form more compact and efficient bodies, and to act with greater effect against an enemy.

But we are now arrived at a period, when by the general adoption of fire arms into the armies of the continent, it becomes requisite to reform many of the tactics formerly bearing out the art of war, and amongst others to discontinue the bow and arrows; accordingly we find proclamations issued to prepare the people for the great change about to take place, and to reconcile them in some measure to their loss of what had so long been the favourite weapon of the country.

"Hundred de Wyrrall.

To the parson, vicar, or curate of the pishe Churche of Neston.

By virtue of lies from the Lls of hir Mats moste ho: privie counsell unto us lately directed we will and require you, That you give open monycyon and warninge upon sondaye next in yor pishe churche, That all and singular the gent' of worshipe or other gent' and freeholders whatsoeve within yor pishe do putly put into order and arraye all such armor, weapons, and other furniture what soever as the or anie of theme ther stand chardged

whall by statute or have at anie time heretofore shewed at former musters whin this countie, so as the sayd armor and weapons may be ready within one howers warninge for her Mats s'vice as for the contrarie evy of them will answere at there sevall pill. Dated at Wooday, ixth of October, 1595.

Yor lovinge frendes,
PETER LEGHE,
W. BRERETON,
H. CHOLMONDELEY,
PETER WARBURTON,
THOMAS WYLBRAM.

Endorsed). A billett for gent and freeholders to be in aredines."

"After or harty commendacions whereas we sent directors to you heretofore for the convertinge of such Billmen into Pikemen and Archers into
muskett shott, as you stande charged to find for her Mats service, not
doubtinge but you have accordingly pformed the same. We are hereby
to will and require you psonally to appeare before us at Burton Hill uppon
fryday the first of Aprill next comminge bringing wth you all such furniture
and weapon for fotemen as you stande charged wthall by statute or have
formerly shewed at other musters heretofore, chaunginge yor Billes into
pykes, and yor bowes into muskettes accordinge to or sayde form lrs.
Whereof hopinge you will not fayle as you tender her Mats svice we bid
you hartely farewell. Northwiche the xijth of Marche, (1596.)

Yor very lovinge frendes,

JOHN DONE, Vier, W. BRERETON, H. CHUMLEY,
P. WARBERTON, T. WILBRAM.

(Superscribed)

To the right worshipp^{ll.}

Sr Rowland Standeley Knight,
John Poole, George Massy,
John Whitmore of Thurstaton
Willm Whitmore of Leighton,

Thomas Bunbury, Peter Bolde of Upton, Edwarde Glegge of Geaton, Esquiors, & to evy of them give theise.

(Endorsed) Commission's lie for musters."

"After or harty comendations. By vertue of lies sent down from ye Lls of hir Mats most Ho: privy Counsell for ye furnishing putting in redines

and trayninge of ye forces of this County, as well horse as fotemen. These shalbe in her Mats behalf to will and require yow and evy of yow. That you send all such horses or geldings and their Riders furnished as yow stand charged w^t all. To Northwich one Wednesday the xixth of this May by xen of the clock there to be mustered and trayned under the Capten apoynted to lead theim. And wheras divers of those web staund charged with the sayd horses have heretofore made defaults at or former musters, either in horses or furniture, or both in so much that or certificate wch we sent last being impfect. We are by the sayde Lls comaunded to returne a more pfect and exact certificate of the sayd sevice. These shall be to will yow also that all yr former defects may be fully supplyed, and the sayd sevice by you so pformed at this tyme, as yow will answer the same upo or certificate next to be sent, wen must be made accordinge to the very trueth as we fynd the same, before the last of this May. So hoping yow will have regard hereof accordingly, we bidd yow hartely farewell. Northwich the vjth May 1596.

Yor very loving freinds,

JOHN DONE ar:

W. BRERETON
P. WARBURTON:

F. CHOLMONDLEY

THOMS WYLBRAM.

We require yow also y^t yow be before us at Burton hill the seventh day of June next ensuyinge, bringing wth yow all such armo^r & weapon for footemen as yow stand charged wthall changeing y^r bowme into muskets & y^{or} billmen into pycks according to o^r form^r directons not yet accomplished.

(Superscribed)

To the Right wor¹¹ or lovinge friends Sir Rowland Standeley Knight, John Poole, George Massye, John Whitmore, Thoms Bunbery, John Hockenhull Willim Whitmore, Peter Bowld, Edward Glegge and Hugh Glascor Esquieres be these dd'"

Prior to the date of these documents, it appears that the arms chiefly used by the soldiers were the bow and arrow, the use of which was carried

to great perfection throughout the country, occasioning that healthy and muscular development of Englishmen, which for several centuries made their name a dread to foreigners; and many were their contrivances to defend themselves against

"the sturdy English, "And their cloth yard shafts."

There is no doubt that the bow and arrow were looked upon by all nations, whether civilized or barbarian, as the most effective weapon that could be found; accordingly we find the bowmen constantly in the foremost ranks in nearly all the great wars, from the period of the Egyptians to modern times, when they went out of use in Europe on the introduction of powder; but even at the present day they are the chief weapon of war used by many civilized countries, as China and India, as well as by the barbarous nations of Africa and America, and the great Islands of the South Pacific and Indian Oceans.

A recent writer on British antiquities, grounding his opinion on the silence of the early authors who wrote on the habits and manners of the Britons, has endeavoured to prove that the bow and arrow were not used by the primitive races of these islands. But I do not agree with him, believing that the great number of flint arrow heads continually found in and around the burial places of the aborigines of Britain were used for weapons of war as well as the chase.

Of the form of these destructive implements we have examples remaining to us from a very remote period; and on the table before you is a very interesting bow, with arrow heads lying beside it, (the shafts of the arrows, being probably made of reeds, were not found, and are supposed to have rotted away): they were discovered in a tomb at Thebes, in Egypt, and by the hieroglyphic inscriptions on the walls of the tomb are computed to have been deposited there about 2500 years before the birth of Christ. Other examples are found on the inscribed tablets taken from the ruins in Assyria and Persia, the Greek sculptures, and other monuments descending to comparatively recent times. They were chiefly of a plain straight round form, tapering to the ends, exactly like those used by our own countrymen until the latter part of the reign of Henry VIII. But though there is no great difference in form, there is much in the size of both bows and arrows, as used by the ancient nations, in comparison with those used by the English in mediæval times; for, while we find the former short and thin, those of

the English archers were of great length and strength, so much so indeed that few but Englishmen could pull the bows, and the arrows were so long that they were called "cloth yard shafts," being of the length of that well-known measure, and having large heavy points of iron of various forms, from the ferules of which it may be seen how thick the shafts must have been.

Of the other weapons, the sword, the dagger and the byll, the two former were not much unlike those now in use, whilst the latter was much heavier and broader in the head than the pointed lance for which it was exchanged.

Of the form of the musket, as first introduced, there is a specimen before you; but very few years elapsed before it assumed various forms and sizes, and many were the fantastic varieties of shape and ornamentation it underwent, until at a more recent period it was made of an uniform size and design, better adapted to the modern method of warfare, ending for a time in the "Brown Bess," which is also undergoing a great change by the gradual introduction of the more deadly-aiming rifle with the percussion cap.

But whatever value was attached to the various kinds of arms, it appears the musket has often been changed in form and size since its first introduction into the army, and was never considered to be a perfect arm, insomuch that, during the thirty-nine years' peace of Europe, many inventions were tried to render it more effective, and great improvements made, as was experienced in the late Crimean war; and it has since been brought to such perfection that it is thought that wars will not be so protracted as they formerly were, on account of the rapidity with which the musket can be loaded and its greater destructiveness—qualities which I fear will too soon be tested, as whilst I write we have news of disagreements between the Emperor of the French, who espouses the cause of the King of Piedmont, and the Emperor of Austria, of so threatening a nature that it is apprehended they can only end in war, the plains of Lombardy being the first battle-fields.

Since writing the foregoing, I have had recourse to two curious books in my possession, wherein I find a description of the other arms and accountrements named in the orders; one is entitled "The Military Discipline, wherein is most martially shone the order of Drilling for ye Musket and Pike, 1627. Set forth in Postures with the words of Command and Briefe Instructions

for the Right use of the same. To be exercised in Musters By order from ye Lords of his Maties most Hoble Privy Counsaile. Are to be sould by Roger Daniell, at the Angell in Lumbard streete." The book is made up of copper-plate impressions, and contains forty-three figures of "muskettiers," shewing the positions of the soldiers during drill as follows-" March with yr Rest in your Right Hand; march and with your musket cary your Rest; unshoulder your musket; Hold up the musket wth ye right hand and let ye Rest sinke in ye left; In the left hand carry the musket with the Rest; Take your match in the Right hand; Hold your match fast and blow it well; Cocke yor match; Try your match; Garde yor Panne and blow yor match; Hold up yor musket and Present; Give fire; Dismount your musket and carry it wth your Rest; uncocke your match and put it againe betweene yor fingers; cleare youre Panne; Prime your Panne; Shut your Panne; Cast of yor Panne; Blow your Panne; Cast about yor musket; Trayle your Rest; open your charges; Charge your musket; Draw out yor scourer (ramrod); shorten yor scouring sticke; Ramme in yor Pouder; Draw your scourer out of your musket; shorten your scourer; Returne yo' scourer; Bring your musket forward wth the left hand; Hold ye musket with ye Right hand and recover yor Rest; shoulder yor musket; March and wth yor musket carry ye Rest; unshoulder your musket; Lay your Musket in yo Rest; Hold yor musket in ye Rest; Hold ye musket with ye Rest in ye left hand onely in ballance; Take yor match in the Right hand; Blow of your match; Cocke yor match; Try your match; Garde yor Panne and be ready." Then follow the instructions for the exercise of the Pike as follows-"Order your Pike; advance your Pike, &c.;" with thirty-two figures of postures, with descriptions, all engraved on copper.

The other is a small pamphlet entitled "Instructions for Musters and Armes, and the use thereof: By order from the Lords of his Majestie's most Honorable Privy Counsayle. Imprinted at London by Bonham Norton, and John Bill, Printers to the King's most Excellent Majestie, 1623." It is divided into two parts, the first relating to pikemen, giving instructions for the use of that weapon; and the second part is "For the musket, with instructions how to advance, with orders as to firing, &c;" at the end of which I find the following—

"The arms of a Pikeman are Gorget, Curats, Headpeece, Sword, Girdle and Hangers.

The arms of a Musketier, are a Musket, a Rest, Bandeliers, Headpeece, Sword, Girdle and Hangers.

It is required, that the muskets be all of a Bore, the Pikes of a length: But to the end this course may not by a suddain alteration turne to a generall charge and burthen upon the people, the Lords Lieuttenants, and the Deputy Lieutenants are rather to use the way of advice and encouragement, as a matter which will be very acceptable to his Majestie, who will take notice of the affection of such as shall most readily provide arms according to this order, then to inforce a present generall observation thereof. But in case where the armes shall be decayed, and must be renewed, this order is to be strictly observed.

The armes of Horsemen, Cuirassiers, are a Gorget, Curats, Cutases, Pouldrons, Vambraces, a left-hand Gauntlet, Taces, Cuisses, a Caske, a Sword, Girdle and Hangers, a case of Pistols, Firelockes, Saddle, Bridle, Belt, Petrel, Crooper, with the leathers belonging to fasten his Pistols, and his necessary sacke of carriage, and a good horse to mount on.

The armes of a Hargo-buzier or Dragon, which hath succeeded in the place of light horsemen (and are indeed of singular use almost in all the actions of warre), the armes are a good Hargobus or Dragon, fitted with an iron worke to be carried in a Belte; a Belte with a Flaske, Priming-box, Key and Bullet-bag, an open Headpiece with cheekes, a good Buffe Coat with deep skirts, Sword, Girdle and Hangers, a Saddle, Bridle, Bitt, Petrell, Crooper, with strappes for his sacke of necessaries, and a horse of lesse force and lesse price than a Cuirassier.

In the exercise of the foot troupes, the companies are to be of hundreds onely, besides officers, that they may bee so much the nearer together to be trayned and exercised with lesse paines to the souldiers, and lesse losse of time, when they shall be called together by their captaine.

* * * * * * * * For it is not intended that the whole Companies should be drawne together to be exercised: But that upon Sundays after Evening prayer and upon Holidays (as it hath beene formerly used for Bow), * * * * &c.

A special care and order must be taken that all those that find a man to serve on Horsebacke, whether they find the horse or the man, or both, must not change the horse or man at their pleasure; for so it would be

every day to practice a new man or a new horse, and the exercise be made vaine, &c.

A principal care is to be taken for the provision of the armes that they may be provided at such rates as they are truely worth, that the people be not subject to the abuse of undertakers for these businesses: and also for the furnishing of every shire with a competent proportion of Match, Powder and Bullets, to which purpose directions have beene heretofore already given. Neverthelesse it is not held necessary, until the souldiers bee perfect in their postures, and ready managing of the Pike when they are armed, and the Musket together with the Rest, that there should bee any expense at all: and then to be exercised with some false fires, which is onely a little powder in the pan: nor at any time to blow away their powder in vaine; but that powder which should be allowed by the country for trayning, be bestowed only at marks: In which case, it is to be wisht, that little small prizes might be provided at the cost of the country, to be shot for at marks, which would give an ambition to men to carry them away, and would save the country more in powder than their value: And a desire in men to render themselves perfect, would make them to finde themselves powder with that money, which on those daies and in those times, would be worse spent in an Alehouse."

The accompanying wood-cuts are drawn after those in the book, and as much in fac-simile as can be done in wood and copper: opposite to them are placed some of the designs taken from the windows at Tranmere Hall, an account of which was published in the Society's Proceedings (see vol. III page 107), which I feel convinced were copied from the copper engravings. Their execution may be assigned to about the year 1627, or soon afterwards.

PLATE 1.





PLATE III.



PLATE IV.





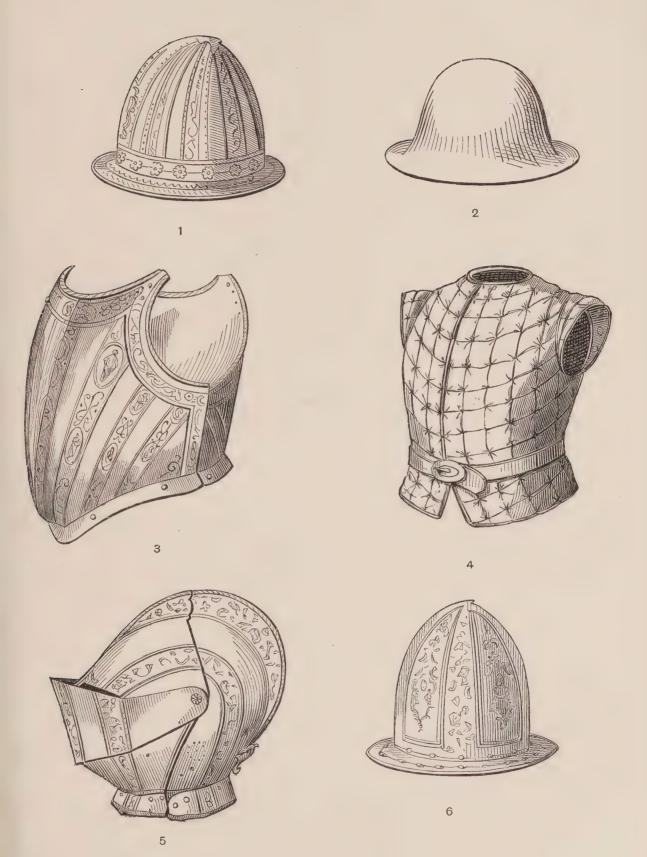
A MUSKETTIER,
1623.



PLATE VI.



PLATE VII.









ON THE POEMS OF OISIN.

By Professor Connellan, of Queen's College, Cork.

(READ 3RD FEBRUARY, 1859)

Introduction.

For nearly one hundred years a controversy has been carried on by Irish and Scotch writers respecting the authenticity of Ossian's poems, while both parties have claimed Ossian as their own countryman. My object is to prove from ancient records and other authorities that Oisin, Finn the son of Cumhall, and the Fiana, were Irishmen and not Scotchmen; and that the poems published by Macpherson were fabrications, founded upon fragments of the compositions of Oisin and other Irish bards, which made their way into the Highlands of Scotland.

In the first place it will be necessary to shew that Ireland alone was called *Scotia* or Scotland, and the inhabitants *Scoti* or Scots, until the eleventh century, when, for the first time, Caledonia, or North Britain, received the name of Scotia; and also, that the Scots of that country were colonists from Ireland, while the language spoken in the Highlands of Scotland and that of Ireland were identically the same.

It is evident that the Irish were known as *Scoti* or Scots, at a very early period; the oldest Irish manuscripts bear testimony to this fact, and Tigearnach in his Annals adds his testimony. Tigearnach was Abbot of Clonmacnois, and his death is recorded in the Annals of the Four Masters, A.D. 1088. He was one of the most learned men of the 11th century, and his annals are considered as a high authority on ancient Irish history. They are written partly in Latin, and partly in Irish; and by one not blindly credulous, as at the very first page of the work we read, "Omnia monumenta *Scotorum* usque Cimbaoth incerta erant,"—"all the records of the *Scots*, till the time of Cimbaoth, were uncertain." He lived in the 3rd century A.C.

But the most unexceptionable authorities on this head are those foreign

writers who mention Ireland under the name of *Scotia*, and call the inhabitants *Scoti*: we can trace such authorities from the 3rd to the 12th century.

The first writer who mentions the Irish as Scots is Porphyr, the Platonic philosopher: he is quoted by St. Jerome, in a letter to Ctesiphon, about A.D. 413, and reported to have spoken of the Irish as Scotica gentes. This testimony is cited by Usher against Dempster. The passage runs, "neque "enim Britannia, et Scotica gentes, omnesque, usque ad oceanum, per "circuitum barbaræ nationes, Moysen prophetasque cognoverant"—"For "neither Britain, nor the Scottish people, nor all the surrounding barbarous "nations as far as the ocean, had known Moses and the prophets."

The Roman poet Claudian in the 4th century, speaking of the battles of Stilicho, with the Britons, and Picts, and the Scots of Ireland, says,

"Totam cum Scotus Iernem" Movit, et infesto spumavit remige Tethys."

"When the Scot moved all Ireland, and ocean foamed with hostile oars." The same writer also, in his praise of the Roman general Theodosius, when celebrating his victories in Britain, mentions the Scots of Ireland in the following passage:—

" Maduerunt, Saxone fuso,

- "Orcades; incaluit Pictorum sanguine Thule;
- " Scotorum cumulos flevit glacialis Ierne."
- "The Orkney isles were moist with Saxon gore;
- "Thule grew warm with Pictish blood; and icy
- " Ireland mourned the heaps of slaughtered Scots."

Here the word "Ierne" confirms the fact that the inhabitants of Ireland were Scots; and Buchanan, as well as other Scotch writers, have admitted that these passages in Claudian, where reference is made to the *Scoti*, are applicable to Ireland.

Ethicus the Cosmographer, in his Description of Europe, speaks of Ireland in these words, "Hibernia a Scotorum gentibus colitur," "Ireland is in-"habited by the Scots."

St. Prosper, who died in A.D. 466, speaking of the mission of Palladius into Ireland says, "Ad Scotos in Christum credentes, ordinatur a Papa "Celestino Palladius et primus episcopus mittitur," "Palladius is ordained by Pope Celestine, and sent as the first bishop to the Scots believing in "Christ."

Palladius was the precursor, or the colleague of St. Patrick in the mission

to Ireland; and St. Patrick himself in his writings calls the Irish, *Scots*: nor do the Scots of North Britain lay claim to either of these Saints as missionaries. It is well known, and generally admitted, that the first missionary to North Britain was our own countryman St. Columbkill.

If any doubts existed as to the evidence above quoted in favour of Ireland, they are utterly removed by the testimony of Orosius, the celebrated Spanish historian, who, writing about the year 416, mentions Ireland thus:

"Hibernia insula inter Britanniam et Hispaniam sita, &c.; hæc proprior Britanniæ, spatio terrarum angustior, sed coeli solique temperie magis "utilis; a Scotorum gentibus colitur; huic etiam Mevania insula proxima "est, et ipsa spatio non parva, solo commoda, æque a Scotorum gentibus "habitatur."—"Hibernia an island situated between Britain and Spain, &c.: "it is nearer to Britain, and smaller in the extent of its territory, but more "serviceable from the nature of its climate and its soil: it is inhabited by "Scottish nations; the Isle of Man is the nearest to it, and that also is of "considerable size, and of good soil, and is likewise inhabited by Scottish "nations."

In the sixth century, Gildas Britannus, in his querulous history of the Destruction of Britain, having told us that his country was trodden under foot by two cruel nations, the Picts from the North, and the Scots from the West, afterwards says, "Revertuntur impudentes grassatores Hiberni "domum,"—"These impudent Irish plunderers returned home." The same writer calls St. George's Channel "Scythica vallis," or the Scythian valley, as it was the sea which separated from Britain the Irish Scots, whom he considered to be of Scythian origin.

St. Isidore, Bishop of Seville, who flourished about A.D. 630, also calls Ireland Scotia. "Scotia," says he, "which is one and the same with Ire"land, is the next island to Britain, of less extent, but of a far more fertile
"soil. It stretches from South to North; its southern coasts look towards
"Iberia (Spain) whence the island borrowed the name of Ibernia. But it is
"also called Scotia, because it is inhabited by the Scots."

The celebrated Anglo-Saxon historian Bede, who lived 672-735, speaks of Ireland to the following effect:—"But Ireland from the salubrity and mild-"ness of its climate far surpasses Britain, so that the snow rarely remains "there more than three days: no man makes hay for winter's provision, or "builds stables for his beasts of burden. The island abounds in milk and

- "honey, nor is there any want of vines, fish or fowl; and it is remarkable
- "for deer and goats. It is properly the country of the Scots, who migrating
- "thence, added a third nation in Britain to the Britons and the Picts."

The same writer, in his History, 3, 27, says, "Many of the nobility and "gentry of the English nation were there (i.e. in Ireland) at that time, who

- "having left their own country, resorted thither for the purpose of studying
- "divinity, or of leading a life of continency. The Scots received them all
- "in a most friendly manner, affording them maintenance, books to read,
- "and teachers to instruct them gratuitously."

Saint Donatus, Bishop of Fiesuli, who died in the year 840, calls Ireland Scotia, in a Latin poem descriptive of this country, which is quoted by De Burgo in his Hibernia Dominicana, p. 8:—

- "Finibus occiduis describitur optima tellus,
 - "Nomine, et antiquis Scotia scripta libris;
- "Insula dives opum, gemmarum, vestis et auri;
 - "Commoda corporibus aëre, sole, solo.
- "Melle fluit, pulchris et lacteis Scotia campis,
 - "Vestibus atque armis, frugibus, arte, viris.
- "Ursorum rabies nulla est ibi: saeva leonum,
 - "Semina nec unquam Scotica terra tulit.
- "Nulla venena nocent, nec serpens serpit in herba;
 - " Nec conquesta canit garrula rana lacu.
- "In qua Scotorum gentes habitare merentur,
 - "Inclyta gens hominum milite, pace, fide."
- "Far westward lies an isle of ancient fame,
- "By nature bless'd, and Scotia is her name;
- "An island rich; exhaustless is her store
- "Of veiny silver, and of golden ore;
- "Her fruitful soil for ever teems with wealth,
- "With gems her waters, and her air with health.
- "Her verdant fields with milk and honey flow,
- "Her woolly fleeces vie with virgin snow;
- "Her waving furrows float with bearded corn,
- "And arms and arts her envied sons adorn.
- " No savage bear with ruthless fury roves,
- " Nor ravening lion through her sacred groves;
- "No poison there infects, no scaly snake
- "Creeps through the grass, nor frog annoys the lake;
- "An island worthy of its pious race,
- "In war triumphant, and unmatched in peace."

In the 9th century, Eginhard, secretary to Charlemagne, in his Annals, under the year 780, says that the Norwegians who invaded Ireland, the island of the Scots, were put to flight. And again, at the year 812, he

adds, "A fleet of the Normans invaded Ireland, an island of the Scots; "and when they joined battle with the Scots, a great number of the Normans were slain, and the rest basely ran away; after which the fleet "returned home."

We may state also that Nennius, the British historian, mentions Ireland under the name of Scotia, and calls the inhabitants Scoti; and in speaking of the colonies of Ireland, he says, "Novissime venerunt Scoti a partibus "Hispaniae ad Hiberniam." "Last of all came the Scoti from parts of "Spain to Ireland."

In a translation into Irish of the Book of Nennius, a copy of which is contained in the Book of Leacan, it is worthy of remark that wherever "Scoti" appears in the original, it has been invariably rendered by the word Gaeil, by which the Irish translators meant the inhabitants of Ireland.

Giraldus Cambrensis, or Gerald Barry of Wales, a British writer of the 12th century, calls Ireland *Scotia*, and says that North Britain also got the name of "Scotia," because the inhabitants were originally descended from the Irish.

Pinkerton, a Scotch writer, in his inquiry into the History of Scotland, says, "By the consent of all antiquity, the name 'Scoti' belonged to the "Irish alone until the 11th century." Then, and not till then, did modern Scotland gain the name of Scotia; its ancient name was Alba or Albain, anglicised Albion, and Albany; and to the present day the people of Scotland are called by the Irish Albanaigh or "Albanians." But from the 12th to the 16th century, various Latin writers thought proper to distinguish between the two countries, by calling Ireland Scotia Major, and Scotland Scotia Minor, or else Vetus et Nova Scotia, "old and new Scotland."

Archbishop Usher is of opinion that North Britain or Caledonia did not get the name of Scotia until the 11th century. "For neither Dalrieda "(he says) which till the year 840 was the seat of British Scots, nor all "Albany did immediately upon the reduction of the Picts obtain the name "of Scotia; but this event was brought about when the Picts and Scots "grew together, gradually, into one nation, and by this coalition the memory "of the Pictish people became quite obsolete, which did not come to pass "until the 11th century; so I am of opinion that no writer of the precedent "periods can be produced, who ever spoke of Albany by the name of "Scotia." However the name Scotia came after this into common use,

when the English began to call the Hibernians, in their own language, "Irish," and in Latin *Iros* and *Irenses*, and their country "Ireland." The name "Ireland" was then propagated among the Germans, French, Spaniards, Italians, and the very Arabians. For the Nubian geographer, about the year 1150, calls Ireland by the name *Irelanda*, and Albany by that of *Scotia*.

Bede, aware of the origin of the Scots of Albany, mentions them under that name, but he is always careful to distinguish between the Scots who inhabited Ireland and the Scots of Britain: and never, in any of his works, does he call North Britain by the name of Scotia.

From a very early period of our history we find that colonies from Ireland settled in Albain or Scotland. It is stated in the Book of Leacan, that the Picts came from Thrace, and landed in Ireland, whence they proceeded by direction of the Milesians who then governed the country, to North Britain, of which they took possession. The Picts intermarried with the Milesians, and some of them remained in the North of Ireland, in the present county of Antrim, where they became a powerful sept, and are frequently mentioned in our annals.

The Fir-bolg, who rebelled against the Milesians in the first century, were called Athach Tuatha, a name which has been latinised Attacotti, and anglicised Attacots. They were at length subdued and expelled by Tuathal Teachtmar, or Tuathal the acceptable, a Milesian prince, on his return from exile in Albion. They fled in great numbers to the Hebrides, where they settled, and also along the river Clyde; and becoming mixed there with the Picts, they assisted them in their wars against the Romans, in the third and fourth centuries, being known to the Romans under the name of Attacotti.

As to the Scottish colonists that settled in Caledonia, ancient Irish History informs us that Conaire II, monarch of Ireland, of the Heremonian line, reigned eight years, and died A.D. 220. One of his sons, named Cairbre Riada settled in Ulster, and the country possessed by his people was called Dal Riada, contracted "Reuta," and still called the "Route," which now forms the northern part of the country of Antrim. This Cairbre Riada being an adventurous warrior led his forces into Albain or Caledonia, where he settled a colony in the territory which now forms Argyleshire, and the adjoining districts, during the reign of Art, brother-in-

law of Conaire, and monarch of Ireland, in the early part of the third century. The country conquered by Cairbre Riada in Albion was thenceforth denominated Dal Riada, or the county of Riada, and the colonists were called Dalriedians, like their original stock in Ireland.

The Venerable Bede is conclusive on this point, and puts the subject past controversy; his words are—"In the course of time, Britain received, "after the Britons and Picts, a third colony, who were Scots, in the country "of the Picts. These Scots came from Ireland, under the command of a "general named Reuda, and either by friendship or by the sword procured "settlements for themselves among the Picts, which they still retain. From "the name of their commander they are to this day called Dalreudians; for "Dal in this language signifies a 'portion' or 'territory."

In the fifth century, Erc the son of Eohee Mumrevar, a descendant of Cairbre Riada, was prince of Dalrieda in Ulster; and his sons Fergus, Loarn, and Angus, led another colony from Ulster to Albion, and became masters of the country which now comprises Argyleshire, Bute and the Hebrides. Fergus became the first king of the Albanian Scots of North Britain, and his death is recorded by the annalist Tigearnach, at the year 502, who states that Fergus the Great, son of Erc, accompanied by the race of Dalrieda, occupied a part of Britain, and afterwards died there.

In order to secure his throne, Fergus sent to his brother Murtogh, son of Erc, who was then monarch of Ireland, for the Lia Fail, or Stone of Destiny, to be inaugurated thereon as king of the Scots in Albion. stone was sent, but never returned, as the Albanian Scots fancied that while it remained among them, their state would be unshaken, in accordance with an old prophecy, which in Irish runs thus:-

> Cineadh Scuit saor an fíne Munab bréag an fhaisdine; Mar a bhfuighid an Lia Fail, Dlighid flaitheas do ghabhail.

which has thus been rendered by Hector Boethius, a Scotch writer, and from him given by Camden:-

> Ni fallat fatum, Scoti, quocunque locatum Invenient lapidem, regnare tenentur ibidem. "If fate's decrees be not announced in vain, "Where'er this stone is found the Scots shall reign."

Fergus the son of Erc was succeeded in the Dalriedian monarchy in 529 by his son Domangart, who was also succeeded by his son Comgal in the year 534. In 558 his brother Gabhran mounted the throne, and he was succeeded by his nephew Conall, son of Comgal in 560. It was this prince who bestowed the island of I, or Iona, upon St. Columbkill in the year 563. In the year 574 Conall died, and was succeeded by his cousin Aodan, who accompanied St. Columbkill in 590, to the great convention held at Drumceat, near Drumachose in the county of Derry, at which Aodh son of Ainmirach presided. According to the Annals of Tigearnach, St. Columbkill departed this life in his monastery at Iona, A.D. 596, on the night of Pentecost, being the 9th June, in the 77th year of his age.

One of the objects of the convention held at Drumceat was to determine the jurisdiction of the Albanian Dalrieda. The question at issue (says Dr. Reeves) is variously stated: O'Donnell (who wrote a life of St. Columbkill in the beginning of the 16th century) would have it that Aidan laid claim to the sovereignty of the Irish Dalrieda, and required that it should be exempt from the rule of the Irish monarch. Keating and O'Flaherty, on the other hand, state that the dispute arose from the demand of Aidan, the Irish king, to receive tribute from the Albanian prince as from the governor of a colony. They agree, however, as to the decision, which was, that the Irish Dalrieda should continue under the dominion of the King of Ireland, and that the sister kingdom should be independent; with the understanding that either power should be ready, when called upon, to assist the other, in virtue of their national affinity; and it is fully attested by our Irish annals, that this league was observed, and that a constant intercourse was kept up by the Albanian Scots with the mother country down to the fifteenth century,

Innes, the Scotch writer, who published his work on the origin of the Scots in 1729, acknowledges that the Scots of Albion were from Ireland. "In a word (he adds) I mean those Scots of whom the Scots in Britain are "descended, and from whom they took their name." In this work he has given a list of Scottish kings in Albion, whose names are purely Irish.

Kinneth the son of Alpin, or as he is generally called Kinneth Mac Alpin, the twenty-third ruler of the Albanian Dalrieda, and father-in-law of Aodh Finnliath monarch of Ireland, ascended the throne A.D. 838. In the year 842 he conquered the kingdom of the Picts, and became monarch of the entire country between Edinburgh and Caithness. He then removed the Stone of Destiny from Dunstaffnage in Argyleshire, to Scone near Perth,

and inclosed it in a wooden chair, on which he was inaugurated the first king of all Albion or Scotland.

In the year 1058 Malcolm son of Donchad became king of Scotland, and the poem recited by his chief bard at his inauguration is still preserved. A copy of this poem is contained in the Book of MacFirbis, in the Royal Irish Academy, and has been published with a literal translation in the works of the Archæological Society. It has also been given by Dr. O'Conor in his Rerum Hibernicarum Scriptores, from two ancient MSS. in the Stowe Library; and Mr. Skene, a Scotch gentleman and an eminent Gaelic scholar, has given an English version of it in the Transactions of the Iona Club, published in 1834.

This poem is acknowledged on all hands to be of the utmost value, as the connecting link in the history of the Gaels of Ireland and Scotland. Pinkerton calls it "beyond question the most ancient monument in the "Gaelic language of Dalriadic history extant." It is purely Irish, and in the style of language and composition common at the period to which it is ascribed. In it are given the names of the Milesian Kings of Scotland, from the time of Loarn, Fergus and Angus, (the three sons of Erc, of the race of Conaire II.) to the time of Malcolm in the 11th century, with the number of years they reigned over Scotland, respectively. Malcolm, then king of Scotland, felt highly honoured in having it proclaimed to the world, by his chief bard, that he was descended from the monarchs of Ireland.

Sixty kings of the Scottish race reigned in Albion during a period of 784 years, from the time of King Fergus, A.D. 502, to the death of Alexander III., King of Scotland, in the year 1286. In the reign of John Baliol, A.D. 1296, Edward I. King of England, having overrun all Scotland with his victorious arms, conveyed the regalia of that kingdom into England, and among the rest the Stone of Destiny, which the people of Scotland always regarded as a sort of palladium, fancying that while it remained among them their dominion would remain unshaken. To cure the Scots of this opinion, to make them believe that the dissolution of their monarchy was at hand, and to extinguish their hopes of recovering their liberty, king Edward had it conveyed to Westminster Abbey, where it may be seen at this day.

It was about this time that the MacDonnells, Lords of the Isles, or Hebrides, came to Ireland, and formed a settlement in the county of Antrim.

They were famous warriors, known as chiefs of Galloglasses, and afterwards aided the Earl of Desmond in his wars with the English during the 16th century. They became Earls of Antrim in the beginning of the 17th century, and they trace their pedigree up to the Clan Colla, who were Kings of Ulster in the beginning of the fourth age.

Charles O'Connor, in his Dissertations on the History of Ireland, has clearly shewn that the Mac Cathlins, now Campbells, Dukes of Argyle, are descended from Mac Con, Prince of Desmond, and cousin-german of Cairbre Rieda; and O'Flaherty has proved that the Mor-Maors,* or Great Stewards of Lenox and Mars, were descended from Corc, King of Cashel in the fourth century, who, having been expelled from the sovereignty of Munster, retired to Albion, where he married the Princess Mongfinna, daughter of Feredach, King of the Picts, by whom he had three sons, whose descendants became, in after times, Earls and Dukes of Lenox and Richmond.

We are informed in the Annals of the Four Masters and other Irish authorities, that O'Neill, Prince of Tyrone, O'Donnell, Prince of Tirconnell, and several other Irish chiefs, invited Robert Bruce, King of Scotland, to assume the sovereignty of Ireland, or to send over some prince of his family, as they considered that the house of Bruce had a claim to the crown of Ireland, being maternally descended from the Kings of the Milesian race in Scotland. In accordance with this request, King Robert sent his brother Edward Bruce to Ireland, who landed at Olderfleet, in the bay of Larne, on the coast of Antrim, in the year 1315, with a fleet of 300 sail; and being joined by the Irish princes, he was crowned as King of Ireland near Dundalk.

In the year 1495, O'Donnell, Prince of Tirconnell, went to visit James IV. King of Scotland, and they made a close alliance, offensive and defensive, in virtue, it would appear, of the old league agreed upon by their ancestors at Drumceat in the sixth century.

It is stated that the same King James designed to come to Ireland, for the purpose of assuming the sovereignty of this country, but that he was dissuaded by O'Donnell. However, in the year 1524, a large force of the men of Scotland came to aid O'Donnell, and they are called by the annalists *Albanaigh*, or "Albanian Scots," by which name the inhabitants of Scotland have always been designated by the Irish writers.

^{*} Maors-Majors.

The invasions of the Scots who were in alliance with O'Neill and O'Donnell, were so frequent during the 16th century, that an act was passed in the Irish parliament, whereby it was made treason to introduce or receive any of the Scots into Ireland, and it was made felony for the Irish or English to intermarry with the Scots, without a license under the Great Seal.

The descent of James VI. (I. of England) from the Scottish monarchs of Ireland has been argued by O'Flaherty, by Charles O'Conor and others; and the King himself acknowledged the fact, in a speech delivered at the Council Table in Whitehall, on the 21st April, 1613:—"There is a double "cause (said the King) why I should be careful of the welfare of that "people (the Irish): first, as King of England, by reason of the long pos"session the Crown of England hath had of that land; and also as King of "Scotland, for the ancient Kings of Scotland are descended of the Kings of "Ireland." (See Cox. Hib. Anglicana, vol. ii. p. 29.)

It is obvious that the colonies from Ireland used the language of their mother country, namely, the Hiberno-Celtic tongue; and we may infer that they spoke and wrote it in its purity from the 3rd to the 16th century, in consequence of the continued intercourse between both nations during that time.

The name common to this language, both in Ireland and Scotland, is Gaelic, but the Scotch also call it Earse, which is only a corruption of the word "Irish." Hume says, that "the name of Earse or Irish, given by "the low country Scots to the language of the Scottish Highlanders, is a "certain proof of the traditional opinion, delivered from father to son, that "the latter people came originally from Ireland."

Johannes Major, a Scotch historian, who lived in the fifteenth century, was also of this opinion, for he says, "It is from many arguments plain "that we derive our origin from the Irish. This we are taught by Bede, "an Englishman, who would not be fond of lessening the offspring of his "own country; this is evident from the language; for almost half Scotland "speak *Irish* at this day, and more did so some time past."

Martin, who wrote an account of the Western Islands, published in London 1716, says, concerning the island of Erisca, "The natives speak "the *Irish* tongue more perfectly here than in most of the other islands, "partly because of the remoteness, and the small number of those that

"speak English, and partly because some of them are Scholars, and versed "in the Irish language."

This fact is amply confirmed by that learned Gaelic scholar, Dr. Shaw, a Highlander, and author of a Gaelic Grammar and Dictionary published in 1780. In his enquiry into the authenticity of the Poems of Ossian, he says that "Ireland had all sorts of schools and colleges, and thither the "youth of England and other countries went for education; and all the "popular stories of the Highlands, at this day, agree that every chieftain "went thither for education and the use of arms, from the fourth until "the fifteenth century. I Columbkill, a monastery on the island of Iona, "was first founded by the munificence of the Irish; and until its dissolu-"tion all the abbots and monks belonging to it, one abbot only excepted, "were Irish. All the highland clergy not only studied but received ordina-"tion in Ireland. The clergy of the islands especially, and those of the "Western coast, were frequently natives of Ireland. Hence it happens, "that all poetical compositions, stories, fables, &c. of any antiquity, which "are repeated in the Highlands at this day, are confessedly in the Irish "Gaelic, and every stanza that is remarkably fine, or obscure, is still called "Gaelic Dhomhain Eirionach, i.e. 'the deep Irish, or pure primitive lan-"guage of Ireland." I am conscious (he adds) that without a knowledge "of Irish learning, we know nothing of the Earse as a tongue, the Irish "being a studied language, and the Earse only a distinct provincial dialect."

Dr. Johnson, in his account of the Western Isles, argues that the Earse or Scotch Gaelic was an unwritten speech, in which nothing that is not very short can be transmitted from one generation to another. The Scotch (he adds) had not even the Bible in their own dialect, but used the Irish translation, which they published in 1690, but printed in the Roman letter instead of the Irish character.

James Macpherson confirms the Doctor's opinion, for he states, in his Dissertation on the Poems of Ossian, that "the inhabitants of the High-"lands had fallen from several concurring circumstances, into the last "degree of ignorance and barbarism;" and Dr. Blair, following in his steps, says that "the inhabitants of the Highlands about two hundred years ago "were in a state of gross ignorance and barbarity."

No wonder then that their language became very much corrupted; and such has been the case, particularly within the last century, as we find by

their Grammars, which are drawn from the spoken dialect, and not from any ancient manuscripts.

But we are not to infer from this that they had no manuscripts, for the Committee of the Highland Society in their Report on the Poems of Ossian, have given specimens in *fac-similes* of several of their Gaelic MSS., in the Irish character which was common to both countries; and it has been lately ascertained that some of these manuscripts, still in the possession of several gentlemen in Scotland, are as old as the thirteenth and fourteenth centuries, all written in the Irish character, and in a corresponding style of language with those written in Ireland at the same periods; and in the pedigrees given in these, all the Celtic families of Scotland are traced up to Con of the Hundred Battles, King of Ireland in the second century. The earliest specimens of their printed works shew that they spoke and wrote the Gaelic language as purely as we did in Ireland.

Bishop Carsuel translated the Confession of Faith and some prayers into the Gaelic language for the Gaels of Scotland; and these were printed in the year 1567. His epistle dedicatory is in the purest Irish, as to orthography, syntax, and phraseology.

From this period the Albanian, or Scotch Gaelic, became gradually corrupted, as shown by their publications at different times. A marked deterioration is perceptible in the poems attributed to Ossian by Mr. Macpherson, but which in reality are only translations from his own English originals, for, as he had but an imperfect knowledge of the Gaelic, these translations are so barbarously executed, in point alike of rhyme, spelling and syntax, that the language employed appears to a Gaelic scholar to be nothing else than a miserable patois.

The Gaelic dictionaries of Scotland are certainly the most correct publications they have, because these have, in a great measure, been compiled from our Irish dictionaries; but the mode of spelling words is too frequently in accordance with the vulgarisms of the colloquial dialect, whence it is clear that any person, who wishes to acquire a thorough knowledge of the Scotch Gaelic, should first make himself master of the Hiberno-Celtic, in order that he may learn to discriminate between the mother tongue and a corrupted dialectic variety.

From the evidences adduced we may justly infer that if such a poet as

Macpherson's Ossian, a Gael (not a *Pict*,) be it remembered, wrote his poems in North Britain in the third century, he must have been either an Irishman or the descendant of Irishmen who had recently come from ancient Scotia to settle in that country; and his language must have been the pure Irish undefiled of that period, and not the corrupt patois ascribed to him by Macpherson.

We maintain, however, that there was no such Caledonian poet, and we shall hereafter endeavour to discover him elsewhere.

RUNIC INSCRIPTIONS: ANGLO-SAXON AND SCANDINAVIAN.

By A. Craig Gibson, Esq.

(READ 10TH MARCH, 1859.)

It must be obvious that a subject on which many volumes have been written, in various languages, can scarcely be treated as its importance demands within the limits of one of our papers; but a cursory examination of the nature, origin and history of Runes, with notices of a few remarkable Runic monuments, and the relation they bear to portions of our early history, may possibly be compressed within allowable bounds, and induce us to extend further our researches into a highly interesting field of observation.

It is significant of the general neglect of this subject, that even the meaning of the word Runes is often misapprehended, and it is by no means uncommon to find that when Runic monuments are spoken of, persons otherwise well informed apply the phrase to the remains of some ancient people who have borne the name of Runes. For instance, I have seen a letter where the writer, a very intelligent person, says, "I have no doubt "but there were freemasons amongst the Runes"! This being the case, it may be excusable to state in limine, that Runes, and its adjective Runic, are terms applying simply to the alphabets used by certain Northern nations before the settlement amongst them of Christian priests brought into general use the now ordinary Roman letters. The original meaning of the word Rûn was that of "a mystery or secret," and those possessing the power of using the Runic characters, who formed only a small portion of the community, were regarded as magicians, or practitioners of a secret art; the characters themselves being looked upon as "mysterious and "awful symbols" not only by the uninitiated but even by those who understood and practised their use. Even after the light of Christianity was shed upon the races whose only literature had been Runic, their ancient alphabets long continued to be extensively employed in constructing charms and incantations, and being regarded as a remnant of Pagan superstition, their use was strongly discouraged by the priesthood.

Though there is abundant evidence to shew that in ancient times Runes were applied to a variety of purposes, it is chiefly in the form of inscriptions on monumental stones, commemorative either of individuals or of exploits, that they have come down to us; and the Runic inscriptions to which I am anxious to direct attention may be said to consist of two distinct varieties, Anglo-Saxon or Teutonic, and Norse, Danish or Scandinavian. That eminent Saxon scholar, the late Mr. Kemble, in a paper on this subject in the twenty-eighth volume of the Archæologia, gives specimens of a third Runic alphabet called Marcomannic or Norman; but as these closely resemble Anglo-Saxon Runes, and the people who used them—the Nordmanni—were the Saxons dwelling in the country north of the Elbe, in fact our own Anglo-Saxon forefathers, it is unnecessary to treat them as a separate variety.

Nearly all the monumental inscriptions in Anglo-Saxon Runes now in existence are to be found within the territories of the ancient kingdom of Northumberland, which up to the close of the eighth century was more advanced in civilization than any other Teutonic nation, and it is from these native monuments that I have collated the materials for the first alphabet in the diagram. Some of the Runic alphabets given by Mr. Kemble comprise more than thirty characters, but this, from the sources indicated, consisting of twenty-six letters, is sufficient for our purpose. The most remarkable features of this Saxon Runic alphabet are the complex form of some of the letters, and the number of characters representing vocal sounds. The first characteristic is well marked in the D, G, H, K, Y and the letter possessing the power of our N G. The number of vowels, without reckoning W and Y, is nine, four being diphthongal, but all possessing their own distinct sounds in the old Saxon tongue, adding greatly to its variety and expressiveness, and existing at the present day in some dialects of the English provinces or of Scotland. The Runic letters standing for these sounds, with two exceptions, may be said to be formed on the basis of the I; the A, O, Æ and EO appearing to be nothing more than slight modifications of the same figure, while the U is our U inverted. The B, I and R are similar to ours. The D resembles an H with a cross between the perpendiculars—the M differs from the D only in having the cross at the upper part instead of half-way down the letter; the E is like the common M; the H has two diagonal cross strokes instead of one horizontal like ours; the N is simply an I with a diagonal bar across its

middle; the T has its superior limbs bent downwards; the L is the T deprived of its left upper limb; the W is like the ordinary Roman P; the Y is the Runic U with a cross stroke and a caudal appendage; while F, G, K, P, S, with the figures that represent the double letters EA, Œ, NG and TH scarcely admit of comparison, and our soft C, our J, Q, V and Z have no representatives in the Runic alphabet.

THE BEWCASTLE CROSS.

Of the inscribed stones from which this alphabet is derived, perhaps the most remarkable and interesting is the famous Saxon cross at Bewcastle, a small town, the capital of a wild district in the north-eastern confines of Cumberland, noted in former times for harbouring a race of cattle lifters and moss troopers, and more recently for possessing an equally honest tribe of horse dealers, popularly said to be, in more than the geographical sense, farther north than even Yorkshire itself. The noble monument that confers so much celebrity upon this remote and otherwise unimportant locality, stands in the church yard, and in the centre of an extensive and distinct Roman castrum. Its form is that of a square pillar, fourteen feet in height, by twenty two inches in width at the base, tapering upwards to fourteen inches at the top. Local tradition has always held that it marks the burial place of a king; but it is only by investigations in our own day that this tradition has been established as veracious. The column formerly supported a cross, its summit still shewing a cavity in which the foot of the cross was sunk; and we learn from a manuscript note in Camden's own copy of the Britannia, in the Bodleian library, that this cross was taken down by Lord William Howard, the belted Will of Border story, who was a zealous antiquary and scholar, as well as a good soldier, and the transverse part sent by him to his relative, Lord Arundel, by whom it was transmitted to Mr. Camden. A copy of an inscription upon it was forwarded by Sir Henry Spelman to one of the earliest Runic scholars, Olaus Wormius, who read it RICÆS DRIHTNÆS, Domini potentis, probably signifying the monument, or cross, or sign of a mighty lord.

The pillar remaining is fixed by means of lead into a cube of stone, and the carvings worked in relievo upon it would suffice, were there no other evidence of the fact extant, to prove the comparatively advanced state of civilization at which the Saxon Northumbrians had arrived in the seventh

century, for as will be shewn, this remarkable monument dates from that epoch, and nothing equal to it, as a work of art, was produced in this country for at least six hundred years later. Its eastern face bears a vine arranged in graceful undulations, profusely branched and supplied with foliage and fruit, each curvature being occupied by a bird or other animal feeding upon the fruit. According to the Rev. John Maughan, rector of the parish, to whose pamphlet on the subject I may here acknowledge my obligations, "The sculpture on this side of the cross has suffered very little "damage from the corroding effects of the weather. The buds, blossoms "and fruit have been so carefully and exquisitely delineated by the chisel of "the workman, and are still so faithfully preserved, that they seem as if "they were things only just starting into life." This side of the pillar bears no inscription, though it is possible that the broken part near the top may have been lettered. All the other sides are copiously inscribed, as well as sculptured ornamentally; and on the west is a figure, now allowed to represent John the Baptist, holding the Agnus Dei. Immediately below this are two lines of Runes, forming the names of the Saviour, and spelled thus, GESSUS KRISTTUS. The initial G, I may remark, had the power of I or Y, so that it may be read Iessus Kristtus, being very near the Latin pronunciation of the sacred words. Below these two lines is a figure, supposed to be that of the Saviour, and below this figure are nine lines of Anglo-Saxon Runes, forming the main inscription on the column. In the interpretation of this inscription a discrepancy exists in the versions given by the most recent authorities. The Rev. John Maughan, whose residence on the spot would indicate superior opportunities for observation, gives one copy which he maintains to be correct, and which when rendered into Roman letters, and properly divided—for it may be observed, that in most Anglo-Saxon inscriptions the letters are placed all in equal proximity, and a line being filled up the next is commenced without any attempt at division into syllables, or even into words—resolves itself into four alliterative couplets, thus:

THISSIG BEACN
THUN SETTON
HWÆTRED WÆTHGAR ALWFWOLTHU
AFT ALCFRITHU
EAN KYNING
EAC OSWIUING
GEBID HEO SINNA
SAWHULA

which may be rendered—Hwatred, Wathgar, and Alwfwol erected this slender pillar in memory of Alcfrid, ane king, and son of Oswy. Pray for them, their sins, their souls.

For reasons I shall give presently, I attach more credit to the reading given by the Rev. D. H. Haigh, of Erdington, in his paper on this subject in the Archæologia Æliana. Mr. Haigh also reads it in alliterative couplets, thus, with an English translation annexed:

This sig bekun,
Settæ Hwætred,
Eom gær f(e)lwoldu,
Æftær baræ,
Ymb Kyning Alcfridæ,
Gicegæd heosum sawlum.

This beacon of honour
Set Hwætred,
In the year of the great pestilence,
After the ruler,
After king Alcfrid,
Pray for their souls.

Without taking into account Mr. Haigh's superior knowledge of the ancient Anglo-Saxon dialects and idioms, and his unquestionable skill and experience in solving antiquarian problems such as this, his reading is to be preferred for several reasons. First, because his accuracy is so clear in the Beckermont inscription, and in other known instances. Secondly, because Mr. Maughan, in his pamphlet, damages his own character for fair dealing, by boasting that he furnished Mr. Haigh with rubbings intentionally made imperfect and inaccurate, for the purpose of misleading him in his early attempts to decipher these Runes; a flagrant, I trust a unique, violation of the courtesy and candour that usually distinguish the correspondence of fellow-labourers in archæological investigation. Mr. Haigh's version is a more correct specimen of the dialect of Anglo-Saxon Northumberland, so far as it is known. Fourthly, Mr. Maughan's copy of the Runes presents several inaccurately formed characters, more especially the letter A wherever he makes it occur. And lastly, an imperfect sketch of this inscription taken by the late Mr. Howard, of Corby, published in 1801 in the Archæologia, and giving little more than the perpendicular parts of the characters, can, by adding the missed portions, be made to coincide much more nearly with Mr. Haigh's transcript than with Mr. Maughan's. Considering well these and other circumstances not necessary to particularize, I cannot hesitate to accept Mr. Haigh's reading of the Runic verses inscribed upon the western side of this monument as the best yet offered.

On the northern and southern faces, besides repetitions of those of the

Saviour, several names occur, such as OSLAAC KYNING (king) WILFRID PREASTER (priest) CYNISWID. CYNIBURUG, CYNGN (queen) EANFLÆD . CYNGN . ECGFRID . CYNING . OSWU CYNINGELT (elder king), all in the same Runic characters. dignitaries, with the single exception of St. Wilfrid, who was his protégé, friend and religious counsellor, were near relatives of the Saxon prince to whose memory the pillar was erected; and this prince, Alcfrid, son of Oswy, king of Northumbria, and in his father's life time king of the province of Deira, performed a very important part in the history of the times, when the Saxon population of England was emerging from the darkness of ancestral paganism into the light of Christianity. Efficiently seconded by his wife, Cyniburg, he was more active than any contemporary in the great work of supplanting amongst his own subjects, and those of his father and father-in-law, Penda, king of Mercia, the rites offered to the repulsive old Saxon gods, by the pure worship of Christ. It is pleasant to find that on the most important particulars, the occurrence of the names of Alcfrid and his relatives surviving on the Bewcastle cross, and the fact that it is a monument raised to his memory, there is no difference of opinion.

Considerable difficulty in arriving at a correct knowledge of the history of this king Alcfrid has been caused by his name being confounded, by many writers, with that of his brother Aldfrid, under the appellation made common to both of Alfred. It would appear, however, that his services to the cause of the only true religion have served, as in many other instances, to cover a multitude of sins. His first appearance upon the stage of history is in the character of a rebel to his father Oswy, combining with Penda, of Mercia, to make war upon him, the plea for this unnatural alliance being that Oswy had made submission to Cadwalla, king of the Later we find him fighting in the great battle of Winwædfield, against his father-in-law, who was slain. And lastly, offering to the monks whom he brought from Melrose to Ripon the alternative of recantation of their Easter doctrine, or dispossession; which last they chose. being reconciled to his father he married the princess Cyniburga, daughter of Penda, a lady who became famous for the exercise of every Christian To her influence it is probable that the great exertions of Alcfrid in the cause of Christianity may be attributed; such as founding monasteries and making benefactions to the church, extending protection

and friendship to eminent proselytising members of the priesthood, and causing the settlement of disputed points of doctrine and discipline, especially that existing between the Romish priests and those trained at Iona as to the period within which Easter ought to fall,—the Scottish party insisting that this great festival should be held from the fourteenth to the twentieth day of the equinoctial moon, whilst all other Christians kept it, as now, from the fifteenth to the twenty-first. This disagreement was likely to cause great scandal, inasmuch as one class of converts might be observing all the austerities of Lent at the moment that the other would be revelling, after the manner of their time, in honour of the anniversary at the close of the season of fast. By Alcfrid's persuasion his father caused a synod to be held at St. Hilda's convent at Whitby, where the leaders of both parties were required to attend and discuss this question, with a view to its settlement. The principal speaker on the Roman side was Wilfrid, afterwards bishop and saint, whose name is found upon the cross at Bewcastle.

The manner of king Oswy's conversion to the orthodox observance does not say much for the intelligence of the greatest Saxon of his day; for it was effected not by force of argument, or by the superior sanctity of the advocates on the successful side, but by their assumption of the exclusive power of admission to paradise, in their possession of the keys of heaven entrusted to St. Peter, still held by the living head of their church. On being asked by the king if they claimed to hold any such power, the followers of St. Columba then present, at the head of whom was Colman, the bishop of York, admitted that they did not, and Oswy at once decided the question in dispute against them, stating sagely that he would not risk being excluded from paradise by offending those who possessed such palpable means of giving their friends admission. The most important effect of this sagacious decision was the establishment, throughout Christian England, of the rule for the observance of Easter that has been in force ever since. Its most remarkable immediate consequences were the resignation of Bishop Colman, his retirement in disgust into Scotland, and the appointment, as his successor, of a priest called Tuda, who, as we are told by Beda, died, within a few weeks of his induction, of the plague, which spread over England in the year 664, and was buried, where it is probable he died, at the monastery of Pagnalæch, which there is now good reason to believe stood at Beckermont, in West Cumberland, a province

then under the rule of the Anglian kings of Northumbria, to which, there is every reason to conclude, the name of Pagnalæch, probably signifying the district of the heathen, was at that period very properly applied.

THE BECKERMONT CROSS.

This leads us to notice a very remarkable monument, not Runic, but interesting from being coeval with the Bewcastle cross, and connected with a striking passage in the history of the prince whose place of interment is marked by the latter, and from furnishing us with an authentic example of the kind of letters with which, at that early period, the Christian priesthood were labouring successfully to supersede the Runes inherited by the people from their heathen ancestors. By the courtesy of a gentleman resident near the spot, I have been put in possession of a description of this monument, so full and so clear that I feel no scruple in quoting it here entire, and I do so the more readily because, though noticed in the county histories, no satisfactory account of it has been published up to this time.

"The grave over which this ancient monument is erected is situated in "the midst of the church-yard, about twenty yards from the south wall of "the church, and runs in a south and north direction, contrary to the "other graves in the burial ground, which all run east and west. It is "covered by two rough undressed slabs of red freestone, to the extent of "seven feet in length by two and a half in breadth, which join each other "in the middle, and rise about six inches above the ground. In the "centre of each slab is a socket, which receives the base of an upright "pillar. The pillar at the south end of the grave, which probably marks "the head, has evidently had a portion of its length broken off, as it is the "shorter by more than a foot." I may mention that since receiving this description I have learned that this now shorter pillar bore a rude cross upon its summit, as is distinctly remembered by an aged native of the parish, still living, so that the sacrilegious mutilation it has suffered is of quite recent perpetration. "The dimensions of this pillar are four feet "four inches in height, the breadth and thickness being about twenty "inches at the base, diminishing upwards to fourteen inches by ten. Its "lower half-not entirely round, but having the appearance of a rude "square, with the angles roughed off-rises about two feet above the slab, "and has no marks of any description upon it. It is then marked by "three rings, or projections of the stone entirely round the pillar, each

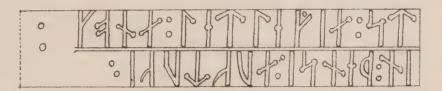
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RUNES ON THE FORT IN BRIDEKIRK CHURCH, from impressions taken by the Ren J Garter

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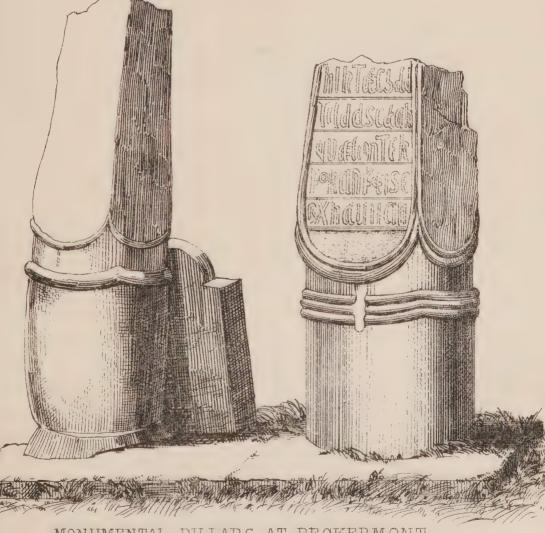
THE CARLISLE RUNES

A. Charlions transcript



RUNES DISCOVERED IN ST PAUL'S CHURCH YARD, LONDON.

Copied from Refn.



MONUMENTAL PILLARS AT BECKERMONT

from a sketch by Grundbank Hones, Esq!

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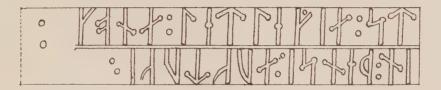
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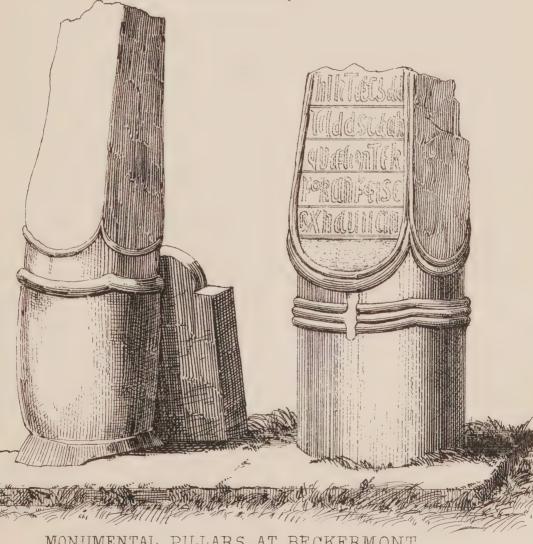
RUNES ON THE FONT IN BRIDEKIRK CHURCH. from impressions taken by the Rev. J. Carter

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THE CARLISLE RUNES Ar Obarlions transcript



RUNES DISCOVERED IN ST PAUL'S CHURCH YARD, LONDON. Clopied from Rafn.



MONUMENTAL PILLARS AT BECKERMONT

from a shelch by Brookbard Hones, Esq!

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"about an inch in diameter, with grooves between. Above these rings, "and for the remainder of its length, the pillar is wrought into four faces, "slightly concave. These are of an oblong form, rounded at the lower "ends, and surrounded by a sort of frame or rim, cut out of the stone, "forming two convex projections; the outer one about two inches in "breadth, and the inner about one. On that looking westward is seen the "inscription. The letters are upright, cut into the stone to a trifling "depth, and are about two inches in length, the lines being divided from "each other by narrow grooves. The face looking eastward is covered by "a sort of scrollwork, one scroll rising out of and above the other, and "divided down the middle. The other two faces of the upper part of this "pillar have no clear marks upon them, but have faint traces of some "device or other formerly existing. The other pillar, at the foot or north "end of the grave, is of smaller dimensions and ruder appearance, except "as regards its height, which is five feet six inches, its breadth one foot "four inches, and its depth one foot. It is of a different sort of stone "from the shorter column, being a coarse grained white sandstone or It has a single ring or projection, about half way from its base, " about four inches in breadth, and but slightly raised. The other part is "more rudely faced, and with no discernible characters or device upon it. "It slightly leans from the perpendicular eastward, and apparently rests "against a low tombstone of more modern date. Both pillars are quite "grey with lichens of various sorts, some of the fronds of which are tufted, "and above an inch long, giving the stones a very venerable and ancient "appearance."

In addition to this excellent description, I have been supplied by the kindness of other friends in the neighbourhood with several rubbings of this inscription and some sketches of the stones. In all the former the letters may be distinguished as under, and in the latter they may be completed so as to coincide. They are the Roman minuscules of the period: the words they form are, like those of the Bewcastle cross, in the old Northumberland dialect, and when properly arranged, resolve themselves also like them into alliterative verse, thus—

HIR TÆGÆD
TUDA SCÆAR
QUÆLM TER FORAN
FÆLS ERXNAWANGAS ÆFTÆR.

The rubbings, so distinct as regards five of the lines, shew that the sixth has been nearly obliterated; but the sense of the preceding lines indicates perfectly what the last must have been; all required to complete the sentence being the final syllable of the long word erxnawangas, and, equally obvious, the word æftær; so that after many anxious examinations of rubbings and drawings, and the most careful study, I must conclude this transcript to be correct.

Many attempts have been made to interpret this inscription, but the rude form of the letters and the limited acquaintance of most observers with the dialect in which it is written have hitherto defeated all such trials.

It is to Mr. Haigh again, and his rare knowledge of the old Anglo-Saxon dialects, that we are indebted for being at length supplied with a correct translation of these lines; and that gentleman gives it thus—

Here enclosed
Tuda Bishop
The plague destruction before,
The reward of Paradise after.

So that these pillars are now shewn to mark the grave of a prelate who died twelve hundred years ago, and also to point out the site of a Saxon monastery, the proximity of which to the sea shore probably caused its early destruction by the heathen Danes who, some time later, wrought great havoc amongst the religious houses of the north of England.

To return to King Alcfrid; the last recorded act of that prince was, conjointly with his father, to assemble the Wittenagemote of their kingdoms for the purpose of appointing a successor in the bishopric to Tuda, who has slept so long a sleep in the quiet little churchyard of Beckermont. No account has been given of the time, manner or place of King Alcfrid's death; but as the last notice taken of him and his acts refers to "the "year of the great pestilence," there can be no doubt now that he was the king whose memory has been preserved though his name was lost for so many centuries, in the vague traditions of the wild borderers of Bewcastle.

THE RUTHWELL CROSS.

The northern side of the border land also possesses a Runic monument of equal celebrity, and probably of equal antiquity, with that of Bewcastle, standing now in the Manse garden at Ruthwell in Dumfriesshire. In form, workmanship, and ornamentation this closely resembles the Bewcastle

THE ANGLO SAXON RUNIC ALPHABET

BEWCASTLE & RUTHWELL CROSSES.

D. G. FRAM NEXHIMENTE

CRYTOPDFTJAXP

SCANDINAVIAN RUNIC ALPHABET.

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| | | R FINAL . Y. | | | |

STUNGNAR RUNIR OR POINTED RUNES

D.

BUNDNAR RUNIR OR JOINED RUNES.

ATK. GTH. AR. AK. AN. AT. UK. UN.

1. R. Y T T P. R. P Y Y AR A

OLAFUR.



OLAFSSON.





column, but differs from it in the nature of the stone and the character of the inscription, which is not commemorative in the ordinary sense, and comprises, besides Runic verses in Northumbrian Anglo-Saxon, scriptural texts in the Latin character and language, both arranged in columns two or three letters in width down the margins of the several faces of the stones, the pillar being in two pieces. These texts relate to incidents in the life of the Saviour, represented in relievo on the central tablets round which the lettering is cut. As, for example, round that containing the figure of Christ with Mary Magdalene washing his feet, we find this passage—"Attulit alabastrum unguenti et stans retrosecus pedes "Eius lacrimis coepit rigare pedes eius et capillis capitis sui "Tergebat."

Many attempts have been made to give a correct interpretation of the Runes on these stones, but no satisfactory conclusion respecting them was arrived at till Mr. Kemble shewed that they formed part of an Anglo-Saxon poem on the Crucifixion, called the Dream of the Holyrood, one of a collection discovered by Dr. Blum at Vercelli, and since published by the Record Commission. Mr. Haigh calls this "beyond all doubt the most "interesting discovery that has ever been made in the field of Anglo-"Saxon antiquities." This gentleman proceeds to argue, and with some success, that the author of this poem must have been no other than Cædmon, a Saxon who composed sacred poems in his own language about the period of the death of King Alcfrid and the erection of his monument at Bewcastle. For a more perfect description than my limits allow of . this noble specimen of early Saxon art-for a most succinct and lucid interpretation of all its inscriptions, and an analysis of the transcripts and readings of previous authorities, I must refer to Mr. Kemble's paper in the Archæologia, and to Mr. Haigh's remarks published in the Archæologia Æliana for 1856. As it bears no names, and alludes to none save sacred events, the Ruthwell Cross has no obvious connection with, and throws no light upon, the early history of our country, and is in that respect of inferior value to those of Bewcastle and Beckermont. Its own history, however, is curious. It is traditionally said to have been cast on the northern shore of the Solway by shipwreck, first erected at a place called Priestwoodside, and afterwards removed to Ruthwell, where a church was built over it, within which it stood for many centuries until, by a barbarous edict of the General Assembly of the Kirk, it was thrown down and

broken, though it remained in the church till the end of last century, when it was cast into the churchyard. The late venerated minister of Ruthwell, Dr. Duncan, to whose memory his country owes a debt of gratitude for more good works than this, collected the fragments and erected the pillar in his garden, where it is still to be seen. From the similarity of workmanship and from other circumstances, Mr. Haigh infers that this was once a companion column to that at Bewcastle; and that it was being carried off by a band of Danish and Scottish marauders when the vessel containing it was cast ashore by a storm. There is certainly more probability in this supposition than in that on which the Irish claim to Stonehenge is founded; and, for the arguments supporting it, I must again refer to Mr. Haigh's most valuable paper.

SCANDINAVIAN RUNES.

The Scandinavian Runic alphabet, while it exhibits in the predominance of straight lines the same evidence as the Teutonic of having been used chiefly to be cut in stone, wood or metal, differs from it in the simpler forms and smaller number of its letters, consisting as it does of only sixteen characters, while, as I have shewn, the Anglo-Saxon contains twenty-six. Some characters, however, in the Danish series possess a double power, and, in some instances, it gives two or more varieties of the same letter. The connection of Runes with the ancient worship of the northern nations is more apparent in the Danish than in the Anglo-Saxon alphabet. They were said traditionally to have been invented by Odin, and several of the letters bore the names of members of the old northern mythology. Thus F was called Freya, TH, Thor, O, Odin, and T, Tyr. Professor Rafn, in his work on this subject published at Copenhagen, and written in Danish with a partial translation into French, expresses his belief that these ancient letters had their origin in the Asiatic country whence the Scandinavian nations migrated, and points out the resemblance existing between them and the old Greek characters, which probably were invented in the same part of the world. The Danish series of Runes, in the work just named, is not arranged in the same order as our alphabet; but I have thought it more convenient to place the letters as ours stand, as shewn in the diagram. It will be observed that nine, or more than one half, of these characters closely resemble their representatives in the Anglo-Saxon series; but the greater advance of that people in the peaceful arts is again indicated by their native alphabet, containing characters equivalent to all the essential

letters used even at this day, besides others representing the diphthongs and double consonants; while the Scandinavians had no diphthongal characters and no separate letters to distinguish B from P, D from T, E from I, G from K, or U from Y, and on nearly all their monuments it is left to the ingenuity of the reader to discover which of these letters is intended. In some, however, of later date the D, E, G, P and Y are distinguished by a dot in the letter, as shewn in the diagram. These were called Stúngnar Runir or pointed Runes; also the Runes of Waldemar, because they occur in a Runic series communicated in 1239 by Waldemar the victorious, King of Denmark, to Olaf, the Skald of Iceland. letters, Bundnar or Binde Runir are also of frequent occurrence. These consist of two or more letters so combined as to form a monogram. diagram gives several examples of these. In some instances a surprising number of letters is included in one of these figures, as in a well-known inscription in Iceland which runs thus-HER LIGGR HALR KARTAN OLAFSSON-Here lies brave Kiartan Olafsson. The eight letters of the last word being thrown into one figure, shewn in the diagram.

Inscriptions in Scandinavian Runes are abundant in Denmark, Sweden, Norway and the Isle of Man, while Ireland and Scotland, where the Norsemen so long maintained a footing, and the Northern and Western Isles, which were colonised by the same people and constituted a Norwegian kingdom independent of the mother country, are singularly destitute of these traces of their occupation. Of the Runic remains of Scandinavia Proper Professor Rafn's work contains a vast collection. Those of the Isle of Man are treated of in Mr. Daniel Wilson's Archæology of Scotland, and in the Rev. J. G. Cumming's "Runic and other "monumental remains in the Isle of Man."

THE BRIDEKIRK FONT.

In this country stones, bearing Danish Runes, are very scarce and the inscriptions upon those we have remarkably brief. Till within the last few years that upon the famous font in Bridekirk Church in Cumberland was the only example known to exist in England; and of this, through the courtesy of the Rev. James Carter, Vicar of Bridekirk, I am enabled to produce an accurate copy. It has engaged the attention of the learned for more than two centuries and a half; and the comparatively late period at which it is evident the work has been executed, the consequently defective and mixed character of the Runes, and the fact, only

recently established, that the letters are principally Danish while the words are old Saxon-English, have been productive of much difficulty and some confusion in the various attempts made to decipher this inscription. Analogous instances of these characteristics are not wanting in the recent histories of Runic inscriptions.

In those in St. Molio's Cave in the small island called Holy Island at the entrance of Lamlash Bay in Arran, Mr. Wilson finds an occasional Saxon letter amongst the Scandinavian Runes, of which they mainly consist. In some of the Manx inscriptions we find a letter resembling the ordinary Runic N, which the context and general sense compel us to read E as in this; and on the beautiful Runic cross at Kirk Braddan, all the letters in the sacred word "IHESUS" are rude attempts at Roman characters, except the U which is Runic; so, in the Bridekirk inscription, A and G are obviously crude imitations of the Roman form of those letters. Of the use of Norse Runes to form sentences in a different language, a curious instance exists in the case of the Hunterston Runic Brooch which, in 1830, was dug up near to the supposed site of the battle of Largs, fought in 1263. This beautiful relic bears an inscription in Scandinavian Runes, which Mr. Wilson shews to be in the Gælic language.

The first mention of the inscribed font at Bridekirk is made in 1607 by Camden, who says of the Runes, "But what they mean, and to what "nation they belong, let the learned determine, for 'tis all a mystery to me." Dr. Gibson's edition of the Britannia contains a letter on this inscription written in 1685 by Archdeacon Nicholson, afterwards Bishop of Carlisle, and his interpretation was accepted by all subsequent commentators, including Mr. Howard of Corby, in the Archæologia in 1801, down to 1820, when Mr. Hamper, in the same transactions, published an entirely new reading of it. Mr. Kemble, in the paper already referred to, ridicules Mr. Hamper's version; and making rather unwarrantable alterations, not having seen the font itself, in Mr. Howard's transcript as adopted by Mr. Hamper, offers a reading of his own which he admits to be unsatisfactory. In 1856 Mr. Haigh proved that Mr. Hamper's version was as nearly as possible correct. The earliest and latest interpretations of this famous inscription are as follow—

Bishop Nicholson's reading was-

ER EKARD HAN MEN EGROCTEN, AND TO DIS MEN RED WER TANER MEN BROCTEN;

i.e., Here Ekard was converted; and to this man's example were the Danes brought.

The version now received as correct differs widely from this. It is—
RIKARTH HE ME IWROCTE AND TO THIS MERTH GERNR ME BROCTE;
which is, Ricard he me wrought, and to this form diligently (or yearningly)
me brought.

Of this total incongruity a considerable portion is due to recent authorities commencing with the letter R, taking the first figure which Dr. Nicholson called E, to represent no letter, but the emblem of the Christian faith, and making the characters consisting of a perpendicular line with a middle cross stroke into vowels instead of consonants. Mr. Kemble's strongest objection to this last version is that the name Ricard is not Anglo-Saxon. Without recognising the weight of this objection, for, supposing this font to be a work of the thirteenth century, it is certain that Ricard, or Richard, had then become an English name, I would suggest another reading, which might meet Mr. Kemble's views so far as the name is concerned. Taking the almost obliterated initial marks, which are certainly doubtful, to have been H E, or either of these letters, I would divide the first word and read it thus:—

HERIK, OR HERIG, ARTH HE ME, &c.;

Herig arduously he me wrought.

The word arth is an old Norse adverb, and may be supposed to describe the difficult nature of the work, as the Saxon gernr does the anxiety and care with which it was finished. I advance this conjecture with the utmost diffidence, for I am conscious that it is in opposition to authorities whose ability and experience in this branch of knowledge are very far superior to mine.

The only relations to history borne by this extensively discussed inscription are to be found in the evidence it bears in the sculpture of the font being inferior to that of the Bewcastle and Ruthwell crosses, of the retrogression of the arts of civilised life in our northern provinces during some five hundred years of warfare; and, in its interblending the Saxon and Norse letters and languages, of the progressive amalgamation of the once hostile occupiers of the country.

Of the other two Danish Runic inscriptions known to exist in England

the next in date of discovery is that found in St. Paul's Churchyard in London in 1852; which is to the following effect:—Konal let leggja sten thennsi auk Toki; in English, Konal caused this stone to be laid, and Toki. A sentence very meagre and insignificant so far as regards historical interest.

THE CARLISLE RUNES.

The third inscription in Scandinavian Runes known in this country is that discovered about four years ago on the wall of the south transept of Carlisle Cathedral, on removing the plaster from the stones forming the lower part of the inside wall. The letters composing this inscription are faint and slender, cut in a stone rough hewn diagonally, the deep chisel marks rendering it a peculiarly unfavourable subject for a rubbing; consequently the one procured for me by a friend in Carlisle is miserably indistinct and unsatisfactory, so that by the most careful tracing and pricking I have not been able to copy from it much more than one-half of the characters. This roughness of the stone and the slightness of the lettering are doubtless the main causes of discrepancy in the readings of the different local antiquaries who have examined this inscription. The most prominent of these are Mr. Ferguson, the author of "The Northmen "in Cumberland and Westmoreland," the Rev. John Maughan of Bewcastle, and Dr. Charlton of Newcastle-on-Tyne. All these gentlemen, besides Professor Munch of Christiania, to whose inspection a transcript was submitted by Mr. Ferguson, are now agreed that the first word is "Dolfin," a proper name of frequent occurrence in ancient chronicles, still in use as a surname in Cumberland, and also as a component of several topographical words. They also agree that the last word is "stain," but there all agreement ends. Professor Rafn relates a circumstance which may in some degree account for these perplexing discrepancies. He says that in 1834 he, with Finn Magnusen, a great authority in Northern Archæology, and Theophilus Hansen, went to Herrestrup, a village in Zealand, to examine a group of antique engraved stones, and after spending several hours in vainly endeavouring to discover the engraved marks, they were preparing to depart, just as the sun was upon the horizon, when one of the party happening to throw a parting glance upon the stones, the faint marks appeared clear and distinct in the gleam of twilight, and they were able to complete the object of their journey by taking an exact copy of the design. After relating this incident at some length, Professor Rafn says, "I con"ceived that similar decayed inscriptions rarely become clear by one single inspection of a few hours, or at the most, of a few days, the ordinary space of time that a traveller can devote to them." With such an opinion as this from such an authority we need not remark further upon the incongruities exhibited in the different interpretations of the Carlisle Runes. As Mr. Ferguson adopts Dr. Charlton's first reading, from a copy supplied by Mr. Purday, the clerk of the works for the renovation of the Cathedral, and as Dr. Charlton, after examining the stone itself, abandons this version, it is unnecessary to allude to it farther. Mr. Maughan also modified his reading after examining the stone, and the version he finally adopts is—Tolfinn hraita at Ulphara this stain.

Dolfin inscribed this stone to Ulphar.

Now this reading is peculiarly interesting, because Dolfin was the name of the last Danish governor of Carlisle, expelled by William Rufus in 1092 or 3, when that Monarch took possession of, and re-built and re-peopled the ancient city, which had long lain in ruins. This Dolfin, according to the Saxon Chronicle, had a son, called, in Latin, Ulphius, corresponding with the Norse Ulf or Ulfhar, who was murdered under truce, at York, by Tosti, brother of King Harold. If we could accept this version, and it is extremely tempting, we might fairly infer that Dolfin, contrary to the received opinion, had, before his expulsion, commenced the restoration of the Cathedral, destroyed two hundred years before by his countrymen, and had caused this stone to be inscribed in memory of his murdered son.

Dr. Charlton, to a correspondence with whom I am indebted for much information on the general subject of this paper, holds that this inscription is not monumental, but has had its origin in the mere freak of a workman, and reads it thus:—

TOLFIHN YRAITA THASI RYNR A THISI STAIN.

Dolfin wrote these runes on this stone.

I am inclined to believe that a correct view of the origin and purpose of this inscription is to be found somewhere between the theories propounded by these two gentlemen; and without entering into any minute analysis of the comparative merits of their several versions, only premising that so far as my own knowledge of the subject may carry me, I prefer Dr. Charlton's, I would remark, that the appearance of the stone, with nothing save the Runes to distinguish it from its rudely chiselled neighbours—the faintness of the cutting, consisting as it does of little more than a series

of mere scratches, which had disappeared ages before but for their position in the interior of the building and the protection afforded by the plaster—and its situation within a foot of the ground, all militate against the supposition that this inscribed stone was ever intended to serve as a monument to the son of a chief holding supreme command over the district; while the similitude of the stone to those about it renders equally untenable the suggestion, from another quarter, that it has been a sepulchral stone brought thither from some other situation.

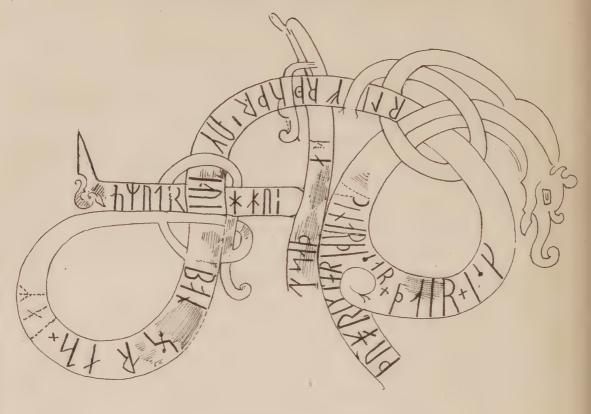
I think, however, that Dr. Charlton underrates its importance when he supposes the inscription to have been produced merely by the whim of a workman. The remarkable circumstances on which there can be no two opinions, that the Runes are Danish and that they commence with the name of the last Danish governor of Carlisle, taken along with the supposed age of that portion of the venerable edifice, also agreed upon, lead forcibly to the conclusion that they relate in some way to the chief in question, and it appears to me the most feasible solution of the mystery to suppose that the inscription is commemorative of Dolfin's share in the restoration of the Cathedral—that this slight vestige of a race from whom the people of our northern counties derive some of their most valuable attributes, had no sepulchral or monumental object, but was simply designed to indicate a pious work of the last Northman who exercised anything like independent rule in England.

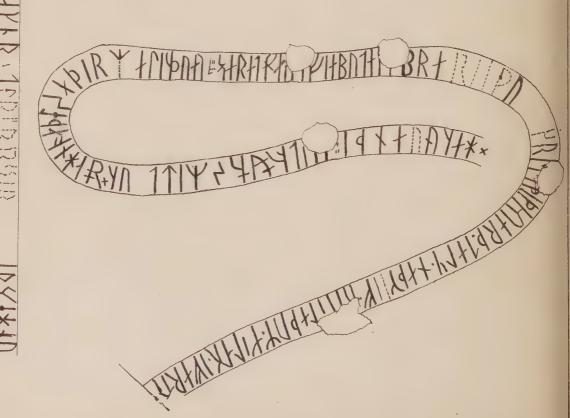
THE LION OF THE PIRÆUS.

My remarks have been confined thus far to Runic remains in our own country. Of those existing in other lands, numerous as they are, there is but one to which I would now wish to direct attention—an instance where a noble specimen of ancient Grecian art, dating at latest from five centuries B.C., is made to subserve the purpose of recording in Scandinavian Runes an exploit of certain Norwegian warriors, whose chief, fatally to himself, and most disastrously for England, afterwards acquired a place in our early history.

I had hoped to be the first to offer, in English, a notice of this most interesting monument, but find that, to some extent, I am forestalled by the writer of a short letter in the Athenæum of January 15th, in which attention is called to Professor Rafn's finely illustrated account of it, of







which no translation, partial or complete, has yet appeared, but from which I deduce the materials for these remarks.

The inscription now in question is that upon the famous piece of antique sculpture known as the Piræan Lion, which, since 1687, has occupied its present position in front of the Arsenal at Venice, having been brought thither as a trophy from Greece when the Venetians, under Francisco Morosini, took Athens from the Turks who had held it from 1456. Lion, which had stood from time immemorial upon the beach of the port called the Piræus, and, from possessing this monument, the Port of the Lion, had long attracted attention by its high merit as a work of art, its magnitude, being ten feet in height, and its antiquity. It was not till towards the end of last century, however, that any notice was taken of certain inscriptions in unknown characters contained in serpentiform scrolls cut into the two sides of this fine specimen of old Grecian art, that on the right side being rather elegant in design and arrangement. Akerblad, a Swedish traveller, was the first to discover that these characters were Danish Runes; and since his time they have engaged the attention of Antiquarian scholars of nearly every European country, including Wilhelm Grimm, the great German philologist, and the high Runic authority, Finn Magnusen of Iceland. But it is to the persevering industry, the practical knowledge and great experience of Professor Rafn that we are indebted for a satisfactory removal of all the difficulties which have heretofore prevented a correct reading of these inscriptions. He has shewn that they are written in the ancient Danish or northern language—in the dialect which of old was spread over the whole of Scandinavia and many other countries, and which still exists in Iceland. The orthography is that usually found in Scandinavian inscriptions, and the letters are Runes such as were in use during the earliest period of Christianity in those countries.

The inscription enclosed within the scroll upon the right side of the Lion is now read as follows—

Asmudr: HJU: runar: Thisar: Thair: Iskir: auk: Thurlifr: Thurthr: Auk: Ivar: at: bon: Harads: Hafa: Thuat: Grikiar: uf: hugsathu: auk: banathu: In English—Asmund cut these Runes with Asgeir, Thorleif, Thord and Ivar, at the request of Harold Hafi (or the tall), though the Greeks considered about and forbade it.

The distinct portion of the inscription is here given in capitals, while

the indistinct and obliterated parts are in minuscular letters. It may readily be supposed that a large experience in deciphering similar records, and a familiar acquaintance with the old dialect in which it is written must have been required to enable any reader to supply the defective parts, trivial as they are, so as to make them accord so perfectly with the context.

This inscription, it will be seen, merely preserves the names of those persons who engraved the Runes upon the marble; that upon the left side, enclosed in a scroll of a much less ornate character, relates the exploit they were meant to commemorate, with the names of the principal actors in it. It is read thus, with the distinctions used in the last—

HAKUN: VAN: THIR: ULFR: AUK: ASMUDR: AUK: AURN: HAFN: THESA: THIR MEN: LAGTHU: A: UK: HARADY: HAFI: UF IABUTA: UPRAISTAY: VEGNA: GRIKIATHITHIS: VARTH: DALKY: NAUTHUGR: I: FIARI: LATHUM: EGIL: VAR: i: FARU: mith: RAGNARI: til: Rumaniu: . . . auk: Armeniu: In English—Hakon with Ulf and Asmund and Orn made conquest of this port. These men and Harold Hafi imposed a heavy fine on account of the insurrection of the Greek people. Dalk is detained captive in far lands. Egil is gone on an expedition with Ragnar into Romania and Armenia.

There is a touch of sentiment in these rude warriors causing the names of their captive and absent comrades to be cut in the enduring marble along with their own; and the circumstance illustrates a remarkable trait in the character of the old Norsemen; for, though "stern to inflict, and "stubborn to endure," it is known that they were also remarkably susceptible to the domestic and social affections.

Of the names occurring in these inscriptions, the only one possessing interest to us is that of the chief Harold, surnamed at that period of his life Hafi, or the tall; and the whole history of this famous Norse leader is replete with romantic interest. He was the sister's son of St. Olaf King of Norway, who was slain at the battle of Stiklastad in 1030. Harold, a youth of fifteen, though according to the Sagas he had even then attained the stature of five ells, old Norwegian measure,—about six feet three of ours,—fought under his uncle at this battle; and, escaping the slaughter, made his way to the court of Jaroslav, Grand Duke of Russia. After remaining there three years, and failing in his addresses to a daughter of his host, Harold proceeded to Constantinople, where, at the age of eighteen, he took service with the Emperor, and soon after was made chief of the

celebrated mercenary corps called the Varangians. This body, prior to the date of the Norman conquest of England, when many refugee Saxons entered it, was composed entirely of Scandinavians. It was probably to this circumstance and to his princely rank in his own country, that Harold Hafi, still a mere youth, owed his elevation to command amongst them. He remained in the Emperor's service ten years and, as the northern Sagas relate, distinguished himself by many glorious exploits and in many countries, as Africa, Palestine and Sicily.

In 1043 he returned to Russia, and in crossing the Black Sea, being, like many of his countrymen, a poet as well as a soldier, he relieved the tedium of the voyage by composing a poem in sixteen stanzas, on his rejection by the parents of the Russian princess, Elizabeth of Holmgard. One of these verses, which is now supposed to allude to the feat of arms recorded on the Piræan Lion, may be given in English rhyme, thus—

The virgin and the matron both
Know well that once at early morn,
Into the city of the south
Our brandished blades by us were borne.
A path we hewed with falchions bright,
A monument our fame retains;
But yet, with rings of gold bedight,
The Russian dame my suit disdains.

The poem appears to have been prepared in anticipation of the rejection of his renewed addresses; but it would seem that his fears were groundless, for he married the princess, whose hand had been denied him ten years before, and then returned to his native country, where he was made joint sovereign with Magnus the Debonair, and after the death of that king, succeeded to the undivided monarchy of Norway. Harold's surname of Hafi was changed soon after this to Hardrada, or the severe, and by this designation he is well known in history, more especially in the history of this country. It will be remembered that in 1066 this King of Norway invaded the dominions of his Saxon namesake, in alliance with the rebel brother of the latter, Tosti the outlawed Earl of Northumberland; and that the allies were both slain with thirty thousand of their army at the battle of Stamford Bridge near York.

It was previous to this battle, that English Harold's famous reply was made to the demand of what he had to offer to Hardrada as conditions of peace:—"Seven feet of English earth; or, as he is taller than other men,

"perhaps a few inches more." Though defeated, this invasion was most disastrous in its consequences to the Saxons of England. Harold had to hasten southward, all unprepared, to meet the Normans; and, but for this Norwegian invasion, and the hard won fight of Stamford Bridge, the battle of Hastings might have had a different result. Thus the name that in defiance of the prohibition of the Greeks was cut in barbarous characters on the ancient ornament of their port, is associated with the events of the most fateful passage in the annals of England.

In connexion with the main subject of this paper I have but further to remark that the only instance I am aware of where numeral figures occur in a Runic inscription is in that discovered, in 1824, at Kirgiktórsoak, in Baffin's Bay, which includes certain unusual characters supposed to represent in figures the year in which it was cut, 1135. It may be observed that the discovery of this evidence of the early visits of the northern voyagers to the far North-West, tends to confirm the accounts given by the Sagas of Iceland, of Norwegian expeditions to America, ages before its discovery by Columbus; these accounts being overlaid with so much obvious romance, that many find it difficult to believe that they contain even this amount of fact.

Having considerably exceeded ordinary limits, I must conclude abruptly, my subject far from exhausted, with the hope that I may have succeeded in attracting the attention of this Society to a most interesting and suggestive field of enquiry which, so far as is indicated in its published transactions, it has hitherto overlooked.

GEOGRAPHICAL TERMS, CONSIDERED AS TENDING TO ENRICH THE ENGLISH LANGUAGE.

By the Rev. A. Hume, D.C.L., &c.

(READ 2ND DECEMBER, 1858.)

Some years ago, a Paper of mine was printed, entitled "Philosophy of Geographical Names," the object of which was to show that from the earliest times to the present hour, and in all countries, the names of places have been imparted on fixed principles. Though the individual who assigns a new name, may appear to himself to act capriciously, he is in reality verifying a known rule unconsciously: so that the knowledge of these principles, and of a few terms from foreign languages, unlocks to us the meaning of a vast number of local words. Thus Eas-ton, Wes-ton, Nor-ton, and Sut-ton, represent places which are related in direction to a larger central town; Middle-ton is the central point between more important extremities; Entre Rios is the country between the rivers; Snea-fel the snowy mountain; and Deux-ponts the two bridges.

I.—Introduction.

In pursuing researches of this kind, the attention was sometimes arrested by a tendency of an opposite kind; and one which does not take effect to any thing like the same extent. It is the reciprocal action of Geographical terms, in giving back to language, significant and useful words. Few suspect that such a fact exists, and I am not aware that any one has done more than merely notice it, in connexion with two or three words. To anticipate a little, for the sake of illustration, words of this kind include the terms bayonet which comes from Bayonne, delf from Delft, and muslin from Mosul. Thus the names of foreign places enrich the English language; and as our productions are very numerous, English local names enrich foreign languages in return. Sometimes, as will be seen, places in any particular country add to the words of that country itself.

Though the number of places which have imparted terms to our language is large absolutely, it is small by comparison. An educated man might

readily explain a hundred names of places, showing that common terms have become proper, before he could produce a single example of this curious reflex action. The origin of such words is concealed by a variety of disguises, such as the remoteness of the derivation in time, or of ourselves in place, or the carelessness of speakers, or the changes incident to words in accordance with the known laws of language. Yet, to the antiquary, the philologist and the lexicographer, most of them are old acquaintances; and when thrown together, especially with a little grouping in classes, one is surprised to see how largely the Atlas has repaid the contributions of the Dictionary. In not a few instances, these two principles are illustrated in the same examples; as we can recognise the time and manner in which a geographical proper name was conferred, and again the time and manner in which it added a common noun to our language. A few examples are given; but many more will be suggested as we proceed.

FIRST PROCESS:—THE DICTIONARY ENRICHES THE ATLAS.

An island in the Atlantic, was named from From the Canary isles we derive canary* a particular species of extinct dog (canis) Canary isle; and the name is now extended to a group of thirteen.

When America was discovered, the people of A narcotic plant, procured originally from a particular island were in the habit of smoking; and from the pipe which they used, called tabak, the island was named Tobago.

The word Archipelago literally means Gre- The term archipelago is now a common cian sea (Argeio-pelagos); which sea possesses the peculiarity of abounding in islands.

Near St. Bride's well in London a prison The term bridewell now means a house of was erected, and it naturally received the proper name of Bridewell.

large dye-house, known as Gobelins' Folly. It was purchased a century after by the King, and called Hotel des Gobelins.

A tribe from Germany, distinguished by long The Italians, called generally Lombards, (as beards, were known as the Langobardi, or Longobardi; they settled in the north of Italy and gave name to Lombardy.

SECOND PROCESS:—THE ATLAS REPAYS THE DICTIONARY.

wine, and the canary bird; also in connexion with the latter, canary seed, and canary colour.

Tobago, was named tobacco; but it is now produced in large quantities elsewhere.

noun meaning a group of islands; and, in general Gazetteers, there are fifteen or twenty enumerated, to which the word is currently applied.

correction; and in some of our large towns there are several.

In the middle of the 16th century the bro- The Hotel des Gobelins was assigned for thers Gobelin, silk dyers of Paris, built a the use of artists of high standing; and the use of artists of high standing; and the tapestry manufactured there is known as Gobelin tapestry.

> all British subjects are sometimes called English,) introduced money lending into London. A money-lender or a bank was therefore a lombard, and the street in which they settled was Lombard street.

^{*} You have drunk too much canaries, and that is a marvellous searching wine.

Let us examine the formation of such words synthetically.

- 1. Nothing is more natural than that a new or peculiar production should be named from the place where it originated; and this accordingly is the first stage in the process, with all words of this class. The geographical allusion is obvious. We have, therefore, such expressions as *Derbyshire* spar, *Geneva* watches, *Ormskirk* gingerbread, *Yarmouth* bloaters, *Cheshire* cheese.
- 2. In the next stage, the local adjective loses its geographical character, and merely denotes that the articles are of the kind produced in that place. Thus, Birmingham cutlery means cutlery of the Birmingham type; and it is not meant that Welsh rabbit (rare bit,) German clocks, Russian cream, Newfoundland dogs, Paisley shawls, Welsh flannel, and Havanna cigars are produced at those places respectively. The terms, in such cases, are used in a new and extended sense; as when we say that a large quantity of port wine is produced in London. A similar extension of meaning takes place in words of various kinds; though hypercritics are always ready to show a supposed contradiction. Thus, a man may experience passion (anger) without suffering; he may subscribe (contribute) without writing his name under; he may encircle (surround) his house by a rectilinear wall; and he may be a sycophant (flatterer) without thinking of a fig-merchant.
- 3. In the course of years a further change takes place. The adjective is quoted instead of the noun, until it becomes itself a noun, and the word, when written, drops the capital letter. Thus we speak of a toledo instead of a Toledo blade, and of parramatta instead of Parramatta stuff. Two classes of persons employ these terms;—the educated who still recognise the local allusion, and the multitude who suppose that the word is somehow descriptive of the thing. The idea of place, whether referring to the locality of the article or merely to its kind, is obsolescent, with more or less rapidity. Thus we say corinthian brass, dunlop cheeses, epsom salts, macassar oil, peruvian bark.
- 4. The last condition in which the words occur is when the transformation is complete, and the idea of place is quite obsolete. The proper noun, referring to an individual place, has now become common, referring to a class; and the original meaning is left to be traced by philologists and others.

It may be interesting to examine some of these words in sets or classes;

and to notice that the law of their formation is general, and not restricted to any one sort of objects. The local allusion at first appears as if in large characters; in time these become diminished; gradually they are ambiguous or undistinguishable; and finally, they require artificial aids to bring them into view.

II.—TEXTILE FABRICS, AND COLOURS.

When we speak of Riga flax-seed, Manilla hemp, or Chinese silk, the geographical allusion is supposed to be seen by every one: we merely refer the material to the district in which it was produced, and the quality is supposed to be known by inference.

The case is different when we speak of Saxony cloth or wool; for, in commerce, the finer kinds of Australian wool and their products have the term applied to them, as being of perhaps equal excellence. Also, when we speak of Brussels or Kidderminster carpets, we only indicate a particular kind: it is not meant that they were woven at either of those places.

The geographical allusion is at least obsolescent in *Arras*,* originally from Arras, in Artois; in *Bayeux* tapestry, a historical piece of needle-work preserved in the cathedral of Bayeux; in *Chantilly*, *Nankin*, and *Padua* serge.

The manufacture of twisted woollen thread was brought into England towards the close of the fourteenth century. It was first produced at the village of Worsted, near Norwich, whence the term worsted; and linsey-woolsey was first woven at Lindsey, a parish near Hadleigh, in Suffolk. In modern times, the word receives a sort of punning application, as it denotes a mixture of lin-en and wooll-en.—A similar mixture was called drugget, from the town of Drogheda, in Ireland. Very little of it is manufactured there now, and the term has become altered in meaning, so as to denote printed floor-cloths made wholly of wool.—At the village of Kersey, near Lindsey, and at the mere beside it, Kerseymere; was first woven. It

^{*} Behind the arras I'll convey myself, To hear the process.—Shaksp., Hamlet.

⁺ The jearnsey worsted mentioned by Stubbes, came from Guernsey.

^{‡ &}quot;Kerseymere" is often confounded with cashmere, a manufacture from Cashmere, in the Punjaub.

Who has not heard of the vale of Cashmere,
With its roses the brightest that earth ever gave,
Its temples and grottos, and fountains as clear
As the love-lighted eyes that hang over their wave?
MOORE, Lalla Rookh.

is now commonly called "cassimer," and the term, as in the case of drugget, is applied to a totally different material. *Kersey** is also an old term for cloth.

The finer kinds of linen came from the Netherlands, and hence certain descriptions are still called *Holland*,† but formerly the term was as general as the word linen. At Cambray, on the Scheldt, *cambric* was first manufactured; *dimity* at Damietta; *calico*[†] at Calicut; *damask*§ at Damascus; *fustian*|| at Fustat, in Egypt; *gingham* at Guingamp, in France; *sleasy*, or "sleasy holland," (a very thin kind of linen) at Silesia; *frieze*¶ at Friesland; and *shalloon* at Chalons.** From Bocking, in Essex, we have *bockings*; *baize* from Baia, near Naples; and *diaper* from Ypres, (d'Ypres,)†† The term *sarcenet* denotes Saracens' silk; and Gobelin tapestry has been

A linen stock on one leg, and a kersey boot-hose on the other.

Shaksp., Taming of the Shrew.

+ The shirt that was upon his back
Was of the holland fine,
The doublet that was over that
Was of the lincome twine.—Old Ballad.

1605; 21 ells of holland at 3/6;—one ell of holland 5/4. "The costume of the wealthy, and in most parts the clothing of the poor, was supplied from abroad."—Wade. "Those countries are rich and wealthy of themselves, abounding with silks, "velvets, satins, damasks, sarcenet, taffeta, chalet and the like, (for all these are made in "those foreign countries.) they might sell them to us for our wools, friezes, "rugs, carsies, and the like. I have heard my father, with other wise sages, affirm "that in his time, within the compass of four or five score years, men went clothed in "black or white frize coats, in hosen of housewife's carzie, of the same colour that the "sheep bare them, and they ware shirts of hemp or flax."—Stubbes, Anatomie of Abuses.

- ‡ Some suppose the word is abridged from "calimanco," a stuff made of wool.
- § "Hanc operis Damasceni vestem quidam putant referri ad vestes scutulatas variis formis luxurientes." "From Beruthe to Sardenare is 3 Journeyes; and from Sardenar is 5 Myle to Damask."—Maundeville, 1356.
- || Some suppose that fustian is derived from foist in, because it and bombast were used as we now employ cotton wool, for stuffing and extending garments. Hence the two English words fustian and bombast as applied to language and argument. Chaucer says of his knight, "of fustian he wered a gipon;"—and in a poem of the 15th century mention is made of "fustian and canvas," "much fustian and linen cloth."
- ¶ 1621: thre y'des of fryse (at iij s.) for a jerkine for my maister, ix s. Shuttleworth Accounts. A ffryze jerkyn ij s. Ib., Appendix. "French cloth or frizard." Ib., Notes.
 - ** And in his owen chamber hem made a bedde With shetes and with *chalons* fair yspredde.

CHAUCER, C. T., 4138.

++ Fine cloth of Ypre, that named is better than ours.

Old Poem: Libel of English Policie.

^{*} A.D. 1619; Pd for vj y'des and halfe of Kyrsey cloth for my Mr (at ijs iiijd) xvs ijd.—Shuttleworth Accounts.—"3 yards of carsey."—Appendix to Do. In 1585 the London Haberdashers sold "Flander-dyed Kerseys."

explained. Silk, anciently serica,* is named from Serica, a province in China; and particular kinds are known as persian, gros de naples, and levant-ines. The material known as jane, formerly "Genne" and "Gens," was originally Genoese in its production.

On the same principle, certain articles of dress are named, as gaskins† (wide hose) from Gascony; galligaskins, viz., Gallic-Gascon‡ hose; dalmatic, an ecclesiastical vestment, from Dalmatia; and cravat from Croatia. This last article was introduced by the Croats when in alliance with the French, and thus it came into general use. "A millen bonnet" (Milan), reminds us of the tuscan plat of our own days; and "a myllyan ffustyan dublytt" contains a double geographical allusion.

In former times, the Phrygians were greatly occupied in making vests, and hence the Latin term *phrygio* to denote a seamstress or work-woman. In like manner, "opus *Phrygianum*," or *Phrygian* work, denoted embroidery, and needle-work of various kinds.

In colours, we used to have *Bristol* red and *Coventry* blue; but *Lincoln* and *Kendal* were used as separate terms for woollen cloth, generally of a green colour. Purple, which was formerly procured at Tyre, is sometimes alluded to under the name of *Tyrian* dye; *Persian* meant blue; and *indigo*, as its name imports, is a product of India. Scarlet was also called *bow-dye*, from the village of Bow, near London, at which it was produced in large quantities. Stamford, in Lincolnshire, was also celebrated for its green cloth; and hence the "albos, nigros, virides, scarleticos, et *stamford*-iatos" of John de Garlande.

It has been remarked, in connection with a kindred subject, that "the "term Lurgan-french-cambric contains within itself the history of the

^{*} The letters r and l are interchangeable, as in lap for wrap, laurer laurel, colonel cor'nel, coriander colianer, turtur turtle. "Sericum, seole."—Archbishop Aelfric's Vocabulary.

⁺ The inner parts of a horse's thigh were also called gascoyns. Shakspeare employs the word noticed in the text, Twelfth Night, i. 5, "if both points break, your gaskins fall." Compare this expression with that in 1 Henry IV., ii. 4, "their points being broken,—down fell their hose."

[‡] The eastern part of the modern Gascony is within the limits of Gallia Braccata, so called from the "breeches," worn by the inhabitants.

[§] Thence to Coventry, where 'tis said-a Coventry-blue is only made-a.—O. B. Drunken Barnaby.

^{||} See note to holland.

^{¶ &}quot;For 4 yards of Kendall for Mayde Marian's huke."—Kingston Parish Records.

"manufacture, which originated at Cambray, was brought to great per"fection throughout France, and is produced, of good quality and in large
"quantities, at Lurgan. A similar remark applies to the term Dunfermline"irish-holland." In another part of the same treatise the following is
added:—"How strange it is that three such simple expressions as
"Damasked Calico Fustian," Cambric Muslin Cravat," and Diapered
"Worsted Galli-Gaskins' should contain allusions to ten different places
"in Europe, Asia, and Africa! One of the simplest and least useful of
"our articles of dress, has tasked the capabilities of the human family to
"contribute their respective parts, from beyond the Euphrates to the basin
"of the Rhine!"*

III.—Animals and Animal Products.

The Newfoundland dog, Manx cat, and Skye terrier, tell their history in their names.—The spaniel is a native of Spain, as the greyhound (Graius) is of Greece. Our domestic puss, more properly "pers," is from Persia, and the name is also extended to the hare.† The tiger is said to be named from his resemblance in rapidity to the river Tigris. The pole-cat is is from Poland.—Among the feathered tribes, some proclaim their origin, as the Guinea fowl, also called "Gallinæ Africanæ," and those known as Cochin-china. But many who speak of Dorkings do not know that Dorking is in Surrey; or that bantams are from Bantam, in India beyond the Ganges. The pheasant (in Latin, phasi-anus) comes from the river Phasis in Georgia, and in provincial English is still known as a phasion.‡—Among horses, we have the Galloway nag, from the ancient kingdom of Galloway, in Scotland; the barb from Barbary; the little ragged shelty from the Shetland Isles; and the raghery, a similar animal, from the island of Rathlin or Raghery, on the coast of Antrim. The hackney is sometimes said to come from

^{*} From "Two Essays on Spinning and Weaving," contributed to the Ulster Journal of Archæology, by the author of this paper.

[†] A MS. in the Bodleian Library contains a mediæval poem, forty-four lines of which mention no fewer than seventy-nine names for the hare! See *Reliquiæ Antiquæ*, i. 133.

[†] Phasiani dicuntur Gallicè faisans.—John de Garlande.

[§] Up rose that Dervise—not in saintly garb, But like a warrior bounding on his barb.

Byron, Corsair.

^{||} Hobby is defined by Sherwood, in 1650, as "cheval Irlandois."—"Of such out"landish horses as are daily brought over unto us I speak not, as the genet of Spain,
"the courser of Naples, the hobby of Ireland, the Flemish roile, and the Scottish nag."
Harrison's Description of England.

Hackney near London, but the French haquenée is also suggested. In France, the camargue is an ungovernable little horse from Camargue at the Mouths of the Rhone.

The leather known as turkey, russia, or morocco, indicates two things: first, the original article manufactured in the country whose name it bears; and second, a less valuable home product, in imitation of it. In like manner, cordovan is a name for a particular kind of leather which came from Cordova,* in Spain; and shoemakers, or workers in leather, are known as cordwainers or cordiners. Our parchment (charta pergamena) was invented at Pergamos; in Asia Minor.—The term Chedder is less known in its application to cheese than Stilton; the former is adopted from Chedder, in Somerset, and the latter from Stilton, in Huntingdon. From the plain of Parma, we derive a product of the same kind, known as parmesan.—The down known as eider is found on a duck which frequents the river Eider, in Holstein; and ermine was originally the production of Armenia.

The designations of men are scarcely less curious. The brigand was named from the Brigantes, because, like them, of predatory habits; and slave is derived from the Slavonians, of whom great numbers were reduced to bondage by the Germans and Venetians.\scalentfrak{S} The term cyprian is sometimes applied to females, like the worshippers of Venus at Cyprus; and the Bulgarians gave to us a word now happily almost obsolete. An Indian is not necessarily a native of India, but a man of savage or primitive\scalentfrak{S} habits; a black-a-moor originally meant a black Moor; and Bohemian is a general term on the continent for gypsy. Swift's names, Liliputian and Brobdignagian, have become general, though Liliput and Brobdignag are only imaginary places. Formerly, a flatterer was an abydocomist, from the

^{*} Cordwane, corium denominatum a Corduba urbe Hispaniæ. Alias quoque marrocin vocant, ab urbe Marrocco. Saracenos quoque Cordubenses nuncupavit media ætas; quòd Corduba tunc fuerit eorum Regia.—Junius, Etymologicum Anglicanum.

⁺ Scriptor habet rasorium, sive novaculam, ad abradendum sordes pergameni (parchemin) sive membrane.—Alexander Neckam, De Utensilibus.

Cum plana pergameniste preparant pergamenum.—John de Garlande.

^{† &}quot;Videntur interim apud Germanos id primitus nomen ii habuisse, quos è fortissimâ "slavorum gente captos in servitute redegissent. Postea vero, latiùs extensa est signi"ficatio vocis ad quosvis cujusvis gentis captivos in servitutem redactos."

Junius, Et. Ang.

[§] Lo! the poor *Indian*, whose untutored mind Sees God in clouds or hears him in the wind; His soul, proud science never taught to stray Far as the solar walk or milky way.

character of the people of Abydos; a Frank* in Turkey means an inhabitant of Western Europe generally; and a person of great stature was a Patagonian. A heroic man is a Trojan; a brutish or ill-mannered person is a Turk; one with great acerbity of temper is a Tartar; and in contention Greek meets Greek. A good Samaritan, or benevolent man is indebted to Samaria for the epithet; and among religious denominations, Romanist originates at modern Rome, and Moravian at Moravia, in Austria. The term Orangeman, known chiefly in Ireland, is derived, by a circuitous process, from Orange,† a small town on the left bank of the Rhone.

Sometimes modern writers, especially the poets, refer to a person well known, by the name of the place where he was born. Thus, Democritus was born at Abdera in Thrace, and hence he is called the *Abderite*; and from his practice of laughing at the follies of mankind, our old English writers spoke of *Abderian* laughter. In like manner, Aristotle, who was born at Stagira in Macedonia, is often called the *Stagirite*, and philosophers of his school the *Stagirites*. On the same principle, we have "Samian sage" (Pythagoras); "Bactrian‡ lawgiver" (Zoroaster); and Scian and Teian§ muse, (Homer and Anacreon.)

IV.—VEGETABLES.

The terms African Marigolds and Swedish Turnips are self-explanatory; but in Ribston pippins the geographical allusion is not so distinct. The name Persian lily shows the native country of the plant, but the Latin

Byron, Isles of Greece.

BYRON, Chi. Har.

BYRON, Is. of Gr.

^{*} Trust not for freedom to the *Franks*,

They have a king who buys and sells;

In native swords and native ranks

The only hope of courage dwells.

⁺ It became a principality in the Middle ages, and from it a member of the house of Nassau derived his title. The Princes of Orange became also Stadtholders of Holland, and one of them King of England. The orange (fruit), "though the same arrangement "of letters is a totally different word," derived from aurantium or malum aureum, as if one of the golden apples which Hercules brought from the gardens of the Hesperides. The two were united by a punning inscription on a medal, representing an orange tree in full bearing and an oak tree prostrated,—"pro glandibus aurea poma." Hence the adherents to William's principles call themselves orange men; and they adopt the orange colour, so named from the fruit.

[†] Behold each mighty shade reveal'd to sight,
The Bactrian, Samian sage, and all who taught the right.

[§] The Scian and the Teian muse, The hero's harp, the lover's lute, Have found the fame your shores refuse.

name, "Lilium Susianum," shows that it was brought from Susa. The Narcissus Japonicus is, as its name imports, a native of Japan; and as the ship which conveyed it to this country was wrecked at Guernsey, where it grew and flourished, it is also called the Guernsey lily.

There are many simple names of vegetables, such as French beans, Seville oranges, Barbary dates, Levant figs. Spinage literally means Spanish (Atriplex Hispanicus); the currant, formerly spelled "corinth," was brought from Corinth;* the damson, or "damascene," from Damascus;† the scallion from Ascalon; the savoy cabbage from Savoy; and the rounceval pea from Roncevalles in the Pyrennees. The apricot is from Armenia, and is called abricock,§ in Somerset, pomum Armenium præcox. The eschalot, or French onion (Allium Ascalonicum), takes its name from Ascalon. An Irish peasant's walking-stick is called a shillelagh, from Shillelagh, in Wicklow, formerly celebrated for its oak forest. The quince or malum Cydonium (quiddoneum,|| or cottoneum) is so called from a town in Crete. The cherry is from Cerasus in Pontus; the peach from Persia; the fama-gust apple from Famagusta** in Cyprus; and the tarragon (Dragon wort) from Tarragona in Spain.

As tea reaches us from China, the various kinds naturally bear the names of the Chinese districts in which they were respectively produced. Thus, bohea, congou, hyson, and souchong, are household and commercial words throughout the civilized world, but they are geographical terms on a map of China. On the same principle, we have the Assam tea, from a part of further India; and Paraguay tea from a district of that name in South America.

^{* &}quot;Currants vel corands, Corinthiaca uva."

^{+ &}quot;Old writers have called those that grow in Syria, near Damascus, damsons or "damask plums, and those that grow in Spain Spanish prunes or plums; others from "the countries, are called prunes of Hungary, France, &c." "The Damascene plum is "round, of a bluish black colour." The Counts of Anjou introduced the "prunes "damysyns" into Europe.—Harland's Illustrations of Shutt. Accts.

^{† &}quot;Ascalonia, ab oppido Judæae nominata est."—Pliny. "Hec ascolonia, a hol-leke." Nominale 15th Century.

[§] Whose golden gardens seeme th' Hesperides to mock, Nor there the damzon wants, nor daintie abricock.

DRAYTON, Polyolbion.

^{||} Similarly quishion for cushion; as "fyve skines to bottome quishiones, ijs. vjd."

¶ Mala pessica (i.e. Persica.)—John de Garlande, 13th Century.

^{**} Very many species of apples, like fruits in general, have derived their names from places where they originated:—as the *Manx* codlin, *Hawthornden* apple, *London* pippin, *Yorkshire* greening, *Blenheim* orange, *Kentish* codling, &c.

V.—WINE AND SPIRITS.

The terms *Devonshire* cider, *Alloa* ale, *Plymouth* gin, and others like them are sufficiently explanatory; but it requires some acquaintance with geography to know that *bordeaux* wine is from a French town of that name, *champagne* from a French province, *moselle* from beside a river which gives name to a French department, and *madeira* from a Portuguese island.

It is of course still more difficult to see that port is from Oporto, sherry* from Xeres de la Frontera in Spain, cape from the Cape of Good Hope, or roussillon from the province of that name in the eastern Pyrennees. In like manner, neckar is from the banks of the Neckar a tributary of the Rhine; tokay from Tokay in Hungary; rhenish from the Rhine countries; vernage from Verona; and malmsey, † anciently "malvoisie," † from Malvasia in Greece. On the same principle chian and samian wine take their names from Chios and Samos; || as Falernian and Massic in the ancient times did from Falernus and Massicus.

Credo sic dictum quasi *Veronaccia*, ab agro *Veronensi*, in quo optimum ex hoc genere vinum crescit.—Skinner. De l'isle de Candie, il leur venoit tres bonnes *Malvoisies* et *grenaches* (gernaches ou *vernaches*?) dont ils estoient largement servis et comfortez. Froissart.

"Throw him into the malmsey butt in the next room."

SHAKSPEARE, Richard III.

"The arrant malmsey-nosed knave,—Bardolph."

SHAKSPEARE, 2 Henry IV.

† Now broach ye a pipe of Malvoisie,
Bring pasties of the doe;
Let every minstrel sound his glee,
And all our trumpets blow.—Scott, Marmion.

^{* &}quot;Vinum notissimum, ab urbe Xeres, olim Escuris dicta, in Andalusia Hispaniæ "Boeticæ provincia, ad ostia Anæ fluvii sitâ, unde advehitur."—Skinner.

^{+ &}quot;The names of sweete wynes I wold that ye them knewe, Vernage, vernagill, vine kute, pyment pasquse, muscadell of grewe, Romney of Modon, bastard, tyre, assey, tentyn of Ebrwe, Greece, Malmesay capericke, and claray when it is newe."

[&]quot;Ye shall have Spaynesh wyne and Gascoyne, Rose-colour, whyte, claret, rampyon,

Tyre, capryck, and malvesyne."—Interlude of the Four Elements.

With him he brought a jubbe of Malvesie

And eke another full of fine Vernage.—Chaucer, Shipmannes Tale.

[§] Ariusium nempe vel Arvisium promontorium est insulae Chii, vulgo nunc Marvisia vel Malvasia corrupte nuncupatur, atque inde vinum hoc denominatum.—Junius. Strabo says, in treating of Chios, "Arvisius is a rough district without a haven, of about "300 stadii, and producing the best wine in all Greece." Virgil, in his Eclogues, alludes to the place under the oldest form of the name:

[&]quot;Vina novum fundam, calathis Arvisia nectar."—v. 71.

A land of slaves shall ne'er be mine:

Dash down you cup of Samian wine.—Byron.

Among the various kinds of spirits, the general terms *Irish* whiskey and *Scotch* whiskey denote colour and quality rather than place; but *ferintosh* and *glenlivat* are distilled at places of the same name in Scotland, and *innishowen* is from the district of Innishowen adjoining Londonderry. Genuine *hollands* are brought from Holland; and the best *cognac* from Cognac in France.

VI.—EARTHS AND MINERALS.

The terms Swedish iron, Caen stone, and Aberdeen granite, explain themselves; but few think that parian marble came from the island of Paros in the Grecian Archipelago. Nitre* is from Nitria, a province of Egypt; and it was usual to speak of terra Cimolia, Chia, Umbria, Samia, &c. We have also copper, literally the metal from Cyprus; † chalybs (steel) and chalybeate from the Chalybes of Galatia; chalcedony from Chalcedon; the agate from Achates, a river of Sicily; syenite; from Syene in Egypt; and permian from the ancient kingdom of Perm in Russia. Gypsum, in Derbyshire vulgarly called "Gibson," is from Egypt§; and the turquoise takes its name from Turkey. The magnet, anciently "magnes," is a production of Magnesia, in Asia Minor. Three metals little known, Yttrium, Erbium and Terbium, all take their names from Yttrium in Sweden. Strontian is from Strontian near Ardnamurchan in Argyleshire.

The principle is illustrated, also, in the case of coins. For example, the bezaunt, in heraldry, was named from its resemblance to a gold coin of that name; and the latter was so called from having been stamped at Byzantium,** now Constantinople. The guinea was supposed to be made of

^{*} Nitrum, a Nitria provincia, ubi maxime nasci solet, nomen accepit.—Jerome.

⁺ In Cypro, prima fuit æris inventio. - PLINY.

[‡] Scientific works contain many such terms, as labrador-ite, baikal-ite, ural-ite, arragon-ite, greenock-ite, tarnovic-ite, (from Tarnowitz, Silesia,) &c., the derivation of which is obvious.

[§] The "Pictorial Vocabulary," in vol. I. of Mr Mayer's Library of National Antiquities, has the following quaint entry. "Hoc egipsum, a egyp-stone."

^{||} It belongs rather to Persia and Thibet.

[¶] Take the ston that Titanos men name, Which is that? quod he. Magnetia is the same.

CHAUCER, C. T. 16,941.

The Ademand, that is the Schipmannes ston, that drawethe the Nedle to him.—

MAUNDEVILLE.

^{**} Est numisma quoddam vetus ab occidentalibus Imperatoribus Byzantii, sive Constantinopoli primum cusum. Erat Bisanteum aureum et album seu argenteum. Bisanteum album valebat duobus solidis nostræ pecuniæ.—Lye. "After Dandrenoble to "Constantynoble, that was wont to be clept Bezanzon."—Maundeville.

gold brought from Guinea, in Africa; just as certain yellow tokens are vulgarly, but untruly, called *California* sovereigns at present. The *ducat** was a Ducal coin of northern Italy; the money formerly known as "marks "lubs" was coined in the free city of Lubec; the *florin*, now an English coin, is from Florence; and the old Irish halfpenny, known as a *crony-bawn*, was made of the copper from the Crone-bane copper mines in the Vale of Ovoca, Wicklow.

VII.—TERMS IN LITERATURE.

Our Athenaums, whether representing institutions or publications, are derived from the temple of Minerva at Athens; academies from the groves of Academus, where Plato taught; and lyceums from the Lyceum at Athens, in which Aristotle taught. From the district of Attica, in which Athens was situated, we derive several words, and sometimes one word has several meanings. Thus, an elegance of speech is known as an atticism, and when there are several in discourse, we are said to season it with Attic salt; while in Philology, that which is delicate, correct, and pure, is attic. We have also the attic order in architecture, and, by a figure of speech, the attic portion of a house. The Spartans and other inhabitants of Laconia were fond of abbreviated expressions, and hence the words laconic and laconism; also, a treatise, consisting of short pithy sayings is called lacon. The Vascones or Gascons were greatly addicted to boasting and untruth, and hence such language is denominated gasconade. From Rome, whose language was corrupted in the middle ages, arose the Romance language, and hence our terms romance, romantic, &c. Some important speeches of Demosthenes, respecting the town of Olynthus, in Macedonia, were called his olynthiacs; and, as in the case of his "philippics," the term has become generalized.

The art of printing was brought to perfection by slow degrees. and various countries contributed more or less to its improvement. We have therefore types known as German text, old English, italic, egyptian, Roman, and gothic. The Arabic numerals, which we derived remotely from Arabia, superseded the Roman notation by letters, found in the writings of ancient Rome. The atlas, whose maps carry the world on their face, is connected with the Atlas mountains, where the royal astronomer lived, who was said to carry the world on his back. The olympiad in time was derived from Olympia, in the Peloponnesus, where games were celebrated periodically; and Mount Parnassus, the fabled residence of the

^{* &}quot;How now, a rat? dead, for a ducat, dead."—SHAKSPEARE—Hamlet.

Muses, gives us a term which is applied to poets and poetry in general. A determined man crosses the Rubicon, as Cæsar crossed the river within which his duty lay; and a person in a remote and little known district, is said to reside in Ultima Thule, from the name which Tacitus gave to the most northern island in our seas. An impracticable scheme is said to be utopian, from Utopia (literally "no place,") described by Sir Thomas More. A portion of the Island of Sardinia was said to produce a disagreeable gas, which had the effect of distorting the features; and hence a sardonic grin came to mean a contemptuous smile.

VIII.—MANUFACTURED ARTICLES.

We read in Chaucer of a "Shefeld thwitel," which a miller bore in his hose; and elsewhere of Ripon rowels, Milan* steel, and Bilbao† blades. But the term bilboes,‡ formerly much in use, is not so readily understood; it indicates manacles or fetters, also manufactured at Bilbao. The ancient name of Birmingham (Brom-wych-ham) is still preserved by the common people; and of late years it has been contemptuously transferred to cheap and flashy jewellery, all of which is known as brummagem.

Of warlike implements, the *carronade*§ comes from the Carron iron works, in Scotland; the *pistol* from Pistoia, in Tuscany; the *pole*-axe from Poland; the *bayonet* from Bayonne, in France; and the *javelin* from the Gaveloces or Frieslanders. A *balearius* was originally a slinger, from the Balearic isles; but afterwards the word came to mean a bowman. A *burgonet* is a helmet of Burgundy.

* Well was he armed from head to heel
In mail of plate, and Milan steel.—Scott, Marmion.

+ Bilbo, a short sword.—Ancient Dictionary.
Like a good bilbo, hilt to point.—Shaksp., Merry Wives, iii., 5.
I combat challenge of this latten bilboe.—Shaks., Merry Wives, i., 1.

Methought I lay, worse than the mutinies in the bilboes.—Shaksp., Hamlet, v., 2.

§ Hairy-faced Dick is a man of his trade, He stands by the breech of a long carronade, The linstock glows in his bony hand, And he watches the grim old skipper's command.

Bentley's Miscellany.

|| "Frisones igitur....ipsum Willielmum (de Hollandia), cum jaculis quae vulga"riter Gaveloces appellant, quorum maximam notitiam habent et usum, Danisque
"securis....e vestigio hostiliter insequebantur."—M. Paris, 1256.

¶ In like manner, Cotgvave writes in 1650:—"Archer, a warder in a town or "fortresse, whose weapon, at this day a halberd, was in old time a bowe and arrowes." Among ourselves there are grenadiers, though the grenade is not now in use; and it is not improbable that a Sheriff's attendants will be denominated Javelin-men, long after the present implements of office have been abandoned.

The *fiacre* was invented by Sauvage, in 1650, at the Hotel St. Fiacre; the *coach* came from Kotsee, in Hungary; the *landau* from Landau, in Bavaria; and the *berlin* from Berlin, the capital of Prussia.

The name American clipper suggests the history of the thing; and so does Venetian gondola. A brigantine is a piratical sort of vessel, and, like "brigand," is derived from the Brigantes. It has been supposed that argosy is derived from the name of Jason's ship, Argo, but it is more correctly derived from the port of Ragusa, which sent forth many of the kind.*

The vases known as etruscan were manufactured in the ancient Etruria or Thuschia (modern Tuscany); but there is a modern Etruria in the English district known as the Potteries. "Staffordshire ware" is an interesting expression; for while we never lose sight of the local allusion, the manufacture is sufficiently described. Ordinary porcelain is called china, because the best kinds were brought from China; and the commoner sort of earthenware is called delf, because brought from Delft, in Holland. Sèvres china is a double geographical expression, indicating a rare and beautiful kind of porcelain, manufactured at Sèvres, in France.

The artesian well is imitated from those at Artois, in France; arabesque indicates the Arabian mode of ornamentation; and a cremona is a violin manufactured at Cremona, in Italy. The practice of japanning was introduced from Japan; polonies are sausages from Bologna; and watches having been invented at Nuremburg, in Germany, were known, during their early history, partly from their shape and size, as Nuremburg eggs.

IX.—PECULIAR WORDS.

Near the modern town Cherson, on the Black Sea, was the ancient Chersonesus, now the Crimea. It is, however, a peninsula, and hence this term became generalized, even in ancient times, so that *chersonese*† means a peninsula. In like manner, mountains in general are called *Alps* in certain circumstances, and we speak of *Alpine* solitudes. From the Delta

BYRON.

^{* &}quot;He hath an argosy bound to Tripolis, another to the Indies: I understand, more"over, upon the Rialto, he hath a third at Mexico, a fourth for England."

Shaksp.—Merchant of Venice.

⁺ The tyrant of the Chersonese
Was Freedom's best and bravest friend;
That tyrant was Miltiades.

at the mouths of the Nile, which was so called from its resemblance to the fourth letter of the Greek alphabet, the alluvial deposit at the mouths of other rivers is called a delta. A person shunning Scylla* falls into Charybdis, or runs from one extreme to the other;—the allusion being to the dangers of the strait of Messina.† The river Mæander, in Asia Minor, was celebrated for its tortuous course, and hence the verb to meander, with a cognate noun and adjective. From Volcano, in the Lipari isles, where Vulcan was supposed to have a foundry, volcano comes to denote a burning mountain.‡ The Cimmerians, of Scythia, were supposed to inhabit a country where, from local causes, the sun was rarely seen, and thus we procure the expression cimmerian gloom.

A prison in which life and comfort are little regarded is called a bastile, from the Bastile formerly destroyed in Paris; a borough prison is usually a bridewell, for reasons already assigned; and from Bethlehem Hospital, which was appropriated to lunatics, and commonly called "Bedlam," the term "bedlam" is used to denote any house for the insane. From the fishmarket in Bilingsgate, London, we derive the term bilingsgate, meaning abusive language such as is common there; and a seductive mode of persuasion, called blarney, is said to be acquired at Blarney Castle, in the south of Ireland. The local term scullavogue (to murder), is derived from Scullabogue barn in Wexford, which was burnt in 1798, with the prisoners it contained.

The purgative root called jalap comes from Xalapa, in Mexico; and

MANGAN-Schiller.

^{* &}quot;When I shun Scglla, your father, I fall into Charybdis, your mother."

SHAKSP.—Merchant of Venice.

⁺ Dire Scylla there, a scene of horror forms,
And here Charybdis fills the deep with storms;
When the tide rushes from her rumbling caves,
The rough rock roars, tumultuous boil the waves.

POPE.—Homer's Odyssey.

It hisses and seethes, it welters and boils,
As when water is spurted on fire,
And skyward the spray agonizingly toils,
And flood over flood sweeps higher and higher,
While the foam, with a stunning and horrible sound
Breaks its white way through the waters around.

[†] In Cycyle is the Mount Ethna, . . . and the Wlcanes, that ben evermore brennynge and Men seyn, that the Wlcanes ben Weyes of Helle.—Maundeville.

sterling, as applied to coin, is taken from the Easterlings*—viz., the Prussians and Pomeranians, who taught working in gold and silver. The morris-dance† of former times was introduced from Morocco, the performers being often dressed in imitation of Moors; and troy weight is so named from Troyes, in France, where it was employed at the large fairs of former times. From Spa, in the Netherlands, mineral springs in general are called spas; Seidlitz, in Bohemia, gives us the word seidlitz, as applied to a medicinal draught; and seltzer water (properly "selters" water) is derived from Lower Selters, near Mayence. Sal-ammoniac was originally procured in the north of Africa, near the temple of Jupiter Ammon; the jointed or German flute was introduced from Germany; and Vauxhall slices, remarkable for their thinness, were characteristic of Vauxhall gardens, near London. The colour prussian blue was first made at Berlin; and hydrocyanic acid, obtained from it, was thence called prussic acid.

The genuine eau-de-cologne is manufactured at Cologne; and the Douay Bible was printed in 1610, at Douay, in France. A pharos is a light-house, so called from that at Pharos, near Alexandria.—The Salique law is derived from the river Sala, the original seat of the Franks;—and by it "the crown cannot descend from the lance to the distaff."—A member of Parliament is said to accept the Chiltern Hundreds when he resigns, the term

^{* &}quot;Annales vero nostri a Germanis Daniæ vicinis, (quos ab orientali hinc situ "etiam hodié *Easterlings* appellamus,) deducunt."—Spelmann. A curious derivation is given in the Dictionary of John De Garlande. "Trapezete numerant...sterlingos "a sto stas, et lingo, -is, quasi lingens statum hominis."

^{+ &}quot;Many who indulge in these sports cover their faces with soot, and assume a foreign species of garb, that they may appear to be *Moors*; and they are thought to have come from a country very remote, and to have brought this rare species of amusement with them."

[†] In terram Salicam, mulieres nè succedant.

No female
Should be inheritrix in Salique land;
Which Salique, as I said, 'twixt Elbe and Sala,
Is at this day in Germany call'd Meissen.

SHAKSP.—Henry V.

^{§ &}quot;An acceptance of 'the Chiltern Hundreds' is a form which has no other meaning "than that the Member accepting resigns his seat. No office, having emolument "attached, can be conferred by the Crown on a Member of the House of Commons "without his thereby vacating his seat, and it is only by obtaining office that a Member "can rid himself of the duties which any body of constituents may impose even without "his consent; the Crown, therefore, for the convenience of the House at large, is always "ready to confer on any Member 'the Stewardship of her Majesty's Chiltern Hundreds, "the Stewardship of the Manor of Poynings, of East Hendred and Northstead, or the "Escheatorship of Munster,' sinecures which he continues to hold till some other "Member solicits a similar accommodation."

being derived from the Chiltern hills, in Buckinghamshire.—The phrase to "run the gauntlet*" is a corruption from "run the Ghent loop," a sort of military punishment which originated at Ghent.—Du Cange tells us that alcantara was a name for a stone bridge, from one at Alcantara, in Spain.

There is often a duplicate process visible in the derivation of words of this class, the geographical term being first transferred to a person, and from him to a thing. Thus Brougham, in Westmoreland, gives title to a peer, and from him again is derived brougham, indicating a particular kind of carriage. Another carriage is called a clarence, from the Duke of Clarence (afterwards William IV.), whose title was derived from the district of Clarence, surrounding Clare Castle, in Suffolk. Bridgewater, in Somerset, gave title to a dynasty of earls, the last of whom, the Rev. Francis Henry Egerton, procured the publication of works known as the Bridgewater Another earl derived his title from Orrery, in the County of treatises. Cork, and a curious planetarium, dedicated to him, was known by this name. Since that time, orrery has been a well-known common noun. An earl who derived his title from Sandwich, in Kent, was fond of eating thin slices of meat between similar pieces of bread; hence the word sandwich, which in common with the foregoing words, has the advantage of being a new term for a new thing. Pinchbeck, in Lincolnshire, gave name to a man who invented the yellow metal pinchbeck, formerly a substitute for gold. Finally, the mazarine hood, like mazarine blue, was derived, by a somewhat similar process, from the Duchess de Mazarin.

X.—EXCEPTIONS.

It must not be inferred, from all the preceding, that every local term, associated with any particular object, expresses the origin of that object, or the source from which it reached us. On the contrary, foreign names are sometimes given from mere caprice, or from ignorance, or from the corruptions of language; and thus the inquirer is liable to be led into occasional mistakes. For example, sealing-wax was originally called *Spanish* wax,

^{*} When a soldier had been convicted of theft, or any similar offence, the men of his Company were arranged in two rows, each armed with a strong rod. The culprit was stripped to the waist, and obliged to run from one end of the lane to the other, each man striking him, if possible, as he passed. In our own days there is no mode of escape left to the offender. In the armies of Austria and Russia, a man walks backward slowly, with a bayonet presented to the culprit's breast; and the latter is thus obliged to move slowly on, the blows descending on him thick and heavy from both sides.

because a material employed in making it was called *Portugal* wax. "The "expression *Spanish* wax is of little more import than the words *Spanish* "green, *Spanish* flies, *Spanish* grass, *Spanish* reed, and several others; as "it was formerly customary to give to all new things, particularly those "which excited wonder, the appellation of 'Spanish.'"* It is on this principle, no doubt, that we speak of *Indian* ink, *Indian*-rubber, *Indian* corn, or *Turkish* corn, and *Spanish* juice.

A few words of this class require special notice. The domestic turkey appears, from its name, to be a native of the Turkish dominions; yet it has been well ascertained that it reached Europet from America. The impression, however, that it was a native of some part of the Eastern Hemisphere shows itself in various forms. Sir John Chardin, while calling the fowls "poulets d' Inde" and "coqs d' Inde," declares that they have come from the West Indies; and before 1600 they were spoken of as "Guiney cocks." In France they are still called dindons (i.e., d'Inde), and in German, kalekutischer, as if from Calicut. An English writer learning that "capons "of grease" (viz., fat capons!) were served up at an entertainment in 1467, gravely infers that they were capons of Greece, and of course Turkeys!— The word gin is sometimes synonymous with geneva, and it is therefore inferred that gin comes from Geneva, also that the best kinds are manufactured there. But there is in reality no geographical reference; language, in its capricious changes, having only shown a coincidence with a well known term. The original word geneva, of which gin is merely an abbreviation, is formed from the French "Genevre," meaning the juniper or berries which impart the peculiar flavour and quality.—The vegetable known as the jerusalem artichoke illustrates also this curious coincidence in language. It has nothing to do with Jerusalem ancient or modern; but is the tuber of a species of sun-flower, originally called by its proper and

And Little Iohn kild a hart of grease Five hundreth foot him fro.

RITSON, Robin Hood.

^{*} Beckmann's History of Inventions, by Francis and Griffith; vol. i., p. 146.

⁺ Hops and turkeys, carp and beer, Came into England all in one year. Pop. Rhyme, temp. Hen. VIII.

the Capons of grease; 3 of a dish;" from a wedding dinner, previous to 1390.

Will Scadlocke he kild a bucke,

And Midge he kild a doe;

descriptive name. In Italian, it is girasole ("turn sol"*) which is thus incorrectly Anglicised into a geographical term. + — The name gypsy appears to import that the people came from Egypt; but there is very strong evidence that they are of Asiatic origin, from Hindostan or some country adjoining it on the west. They try to perpetuate the popular error by saying "our ancestors built the Pyramids," which of course is untrue. Bailey's description of them in his Dictionary deserves to be quoted, "A crew of pilfering stragglers, who under pretence of being Equptians, "pretend to tell people their fortunes." From them is derived gibberish, as if gypsy language. †—The origin of the word tweed, as indicating a peculiar kind of woollen cloth, is curious; and with a notice of it we shall conclude the present series of examples. A Glasgow merchant wrote to his correspondent in London, "we send some tweels for your approval, &c.;" meaning twills or twilled cloths, but illustrating a well-known Scotticism, in which the sound of e is adopted for that of short i. The answer was, "your Tweeds will suit us very well." Again he wrote, saying, "the cloths "sent were 'tweels,' not 'tweeds;'" and to this the reply was, "'tweeds' "or 'tweels,' we adopt both the name and the cloth." It therefore has not, and never had, any connexion with the river Tweed.

Ginger, cinnamon, grains, sugar, turnsoles,—for lords a good making.

A poetical allusion to the plant explains all its names:—

The sunflower turns to its God when he sets, The same looks that it gave when he rose.

MOORE, Irish Melodies.

^{*} The old English word turnsole is almost obsolete, but it was formerly in frequent use, when the plant was employed as a vegetable dye. In an ancient work it is said,—

⁺ Sometimes a correct significant expression is superseded by an incorrect one, and apparently without necessity. For example, the ancient Roman pavements were often in formal patterns, which were sometimes of great beauty; and as these harmonised to the eye as music does to the ear, they were called in mediæval times musaic pavements. Perhaps the applicability of the term was not apparent, for in modern times they are spoken of as mosaic; and we speak of mosaic work and mosaics.—"Musaike work is a "kind of ornament, made in picture with little square stones, like dies of all colours, set together with certaine fine cyment upon a wall or floore, so that the formes of things be therewith pourtrayed and expressed as though they were paynted. Also it is more durable, then anie other kind of paynting; by reason that neither by weather, wearing nor washing, the colour can be taken away, which hath the thickness of the little dies wherewith the work is made. Of this kind of work is little in England; howbeit I have seen it, especially upon Church-floores before altares, as is to be seene before the high altar at Westminster; allthough it be but grosse. In Italie it is almost everywhere, and in most churches to be mett."—Noel, qu. by Junius.

[†] Gibberish quasi Aegyptius (sermo). Qualis erat illorum Saracenorum qui quoque Aegyptií errabundi nuncupantur. Quem Angli vocant etiam "gibble gabble."—Minsheu. Gypsie, "counterfeit tongue and filching vagabond."—Sherwood.

XI.—Names of Persons.

The tendency of places to impart their names, is illustrated not only in the designation of things but in that of persons. Family names or surnames are in reality common nouns, containing under them groups, classes, families, and individuals, with resemblances and differences like any other objects of classification. Now we have the surnames England, Ireland, Scotland, English, Welsh, Manx, &c., originally given to persons from those countries respectively, but not at the time resident in them. the north to the south, places have imparted family names; but it may be sufficient to mention Aberdeen, Montrose, Glasgow, Paisley, Ayr, Carlisle, Lancaster, Preston, Chester, Stafford, Bath, Hastings. Thousands of the proper names which find a place in our directories, are derived from places within the British Islands. In some instances they indicated, and still indicate, possession; in others mere residence; but in the multitude of cases, both these ideas have been lost, and they are merely distinctive. In England, the names from townships are most common,—especially in the North-western shires, as Hopwood of Hopwood, Sefton from Sefton, Fazakerley from Fazakerley. In Scotland, where the civil divisions of townships are almost or altogether unknown, the family names are derived from other local terms, of which there are very many. In numerous instances, families have possessed the same property and occupied the same site since surnames were imparted, that is to say from about the twelfth century. In Scotland, the coincidence of a proprietor's name with that of his estate is indicated in a peculiar way. Thus Dunbar of Dunbar, or Wemyss of Wemyss is described as "of that ilk," viz., of that same (name).

In some historic instances, antecedent or not to the period of surnames, the geographical allusion is obvious; as Dionysius of *Halicarnassus*, Diana of *Poitiers*, Harry of *Monmouth*. In others it is partially so, as Geoffrey de *Bouillon*, William of *Malmsbury*, Simon de *Montfort*. In others, again, it is scarcely distinguishable; as John of *Gaunt* (Ghent), Judas *Iscariot* (from Kerioth*), Thomas of *Ercildoun* (Earlstown). In the course of time, the distinctive particles *de*, *of*, &c., were dropped; and De Clifford became Clifford, De Bois became Boys, De Tournay, Turney, &c.; yet we are familiar with Anthony A'Wood in the past, and Gilbert Abbot A'Beckett

^{*} This derivation is not universally admitted; it is given here on the authority of Bishop Pearce.

in the present. Many of these family names, again, were imparted to places in Ireland during the seventeenth century; to places in the United States during the eighteenth; and they have been given to places in British America, Australia, and New Zealand during the present century.

Thus, the reciprocal influence goes forward, Geography being, as it were, both active and passive. These names, like the sounds in an echo, have their incidence and reflection; the object on which they fall, and from which they are transmitted, being at one time the surface of the earth, and at others a human being or a natural or artificial object. And though, like the echo, these sounds wax fainter in the distance, their characteristics are preserved, and their notes are still distinguishable. In amusing myself with their examination, I venture to believe that I have gathered and arranged some important and curious information; but the point for which I think the remarks particularly valuable is, their suggestiveness.

ON THE POPULAR CUSTOMS AND SUPERSTITIONS OF LANCASHIRE.

By T. T. Wilkinson, F.R.A.S., &c.

(READ 13TH JANUARY, 1859.)

· PART I.

The popular customs and superstitions of Lancashire appear to me to be worthy of a permanent notice. Many of them are very important in an ethnological point of view, and immediately place us en rapport with those nations whose inhabitants have either colonized or conquered this portion of our country. In treasuring up these records of the olden times, tradition has, in general, been faithful to her vocation. She has occasionally grafted portions of one traditional custom, ceremony, or superstition, upon another, as is the case with the remains of some of the most ancient pieces of statuary; but in the majority of cases enough has been left to enable us to determine with considerable certainty the probable origin of each. far as regards the greater portion of our local folklore, we may safely assert that it is rapidly becoming obsolete, and many of the most curious relics must be sought in the undisturbed nooks and corners of the county. is there where popular opinions are cherished and preserved, long after an improved education has driven them from more intelligent communities; and it is a remarkable fact that many of these, although composed of such flimsy materials, and dependent upon the fancies of the multitude for their very existence, have nevertheless survived shocks by which kingdoms have been overthrown, and have preserved their characteristic traits from the earliest times down to the present.

When we refer to the ancient Egyptians, and to the oldest history extant, we find some striking resemblances between their customs and our own. The rod of the magician was then as necessary to the practice of the art as it still is to the "Wizard of the North." The glory of the art of magic may be said to have departed, but the use of the rod remains as a connecting link between the harmless deceptions of the present, and that powerful instrument of the priesthood in times remote. The divining cup, as noticed in the case of Joseph and his brethren, supplies another instance

of this close connection. Both our wise men and maidens still whirl the tea-cup, in order that the disposition of the floating leaves may give them an intimation of their future destiny, or point out the direction in which an offending party must be sought. We have yet "wizards that do peep "and mutter," and who profess to foretell future events by looking "through "a glass darkly." The practice of "causing children to pass through the "fire to Moloch," so strongly reprobated by the prophet of old, may be cited as an instance in which Christianity has not yet been able to efface all traces of one of the oldest forms of heathen worship. Sir W. Betham has observed, in his Gael and Cymbri, pp. 222-4, that "we see at this day "fires lighted up in Ireland, on the eve of the summer solstice and the "equinoxes, to the Phœnician god Baal; and they are called Baal-tune, or "Baal's fire, though the object of veneration be forgotten." Such fires are still lighted in Lancashire, on Hallowe'en, under the names of Beltains or Teanlas; and even the cakes which the Jews are said to have made in honor of the Queen of Heaven, are yet to be found at this season amongst the inhabitants of the banks of the Ribble. These circumstances may appear the less strange when we reflect that this river is almost certainly the Belisama of the Romans; that it was especially dedicated to the Queen of Heaven, under the designation of Minerva Belisamæ; and that her worship was long prevalent amongst the inhabitants of Coccium, Rigodunum, and other stations in the north of Lancashire. Both the fires and the cakes, however, are now connected with superstitious notions respecting Purgatory, &c., but their origin and perpetuation will scarcely admit of doubt.

A belief in astrology and sacred numbers prevails to a considerable extent amongst all classes of our society. With many the stars still "fight in their courses," and our modern fortune-tellers are yet ready to "rule the planets," and predict good or ill fortune, on payment of the customary fee. That there is "luck in odd numbers" was known for a fact in Lancashire long before Mr. Lover immortalized the tradition. Our housewives always take care that their hens shall sit upon an odd number of eggs; we always bathe three times in the sea at Blackpool, Southport, and elsewhere; and our names are called over three times when our services are required in courts of law. Three times three is the orthodox number of cheers; and we still hold that the seventh son of a seventh son is destined to form an infallible physician. We inherit all

such popular notions as these in common with the German and Scandinavian nations; but more especially with those of the Saxons and the Danes. Triads of leaders, or ships, constantly occur in their annals; and punishments of three and seven years' duration form the burden of many of the Anglo-Saxon and Danish laws.

A full proportion of the popular stories which are perpetuated in our nurseries most probably date their existence amongst us from some amalgamation of races; or, it may be, from the intercourse attendant upon trade and commerce. The Phænicians, no doubt, would import a portion of their oriental folklore to the southern Britons; the Roman legions would leave traces of their prolific mythology amongst the Brigantes and the Sistuntii; and the Saxons and the Danes would add their rugged northern modifications to the common stock. The "History of the "Hunchback" is common to both England and Arabia; the "man in the "moon" has found his way into the popular literature of almost every nation with which we are acquainted; "Cinderella and her slipper" is "The "little golden shoe" of the ancient Scandinavians, and was equally familiar to the Greeks and Romans; "Jack and the bean stalk" is told in Sweden and Norway as of "The boy who stole the giant's treasure"; whilst our renowned "Jack the giant killer" figures in Norway, Lapland, Persia and India, as the amusing story of "The herd boy and the giant." The labors of Tom Hickathrift are evidently a distorted version of those of Hercules; and these again agree in the main with the journey of Thor to Utgard, and the more classical travels of Ulysses. In Greece the clash of the elements during a thunderstorm was attributed to the chariot wheels of Jove; the Scandinavians ascribed the sounds to the ponderous waggon of the mighty Thor; our Lancashire nurses Christianise the phenomenon by assuring their young companions, poetically enough, that thunder "is the "noise which God makes when passing across the heavens." The notion that the gods were wont to communicate knowledge of future events to certain favored individuals appears to have had a wide range in ancient times; and this curiosity regarding futurity has exerted a powerful influence over the minds of men in every stage of civilization. Hence arose the consulting of oracles and the practice of divination amongst the ancients, and to the same principles we must attribute the credulity which at present exists with respect to the "wise men" who are to be found in almost every town and village in Lancashire. The means adopted by some of the oracles when responses were required, strangely remind us of the modern feats of ventriloquism; others can be well illustrated by what we now know of mesmerism and its kindred agencies; whilst these and clairvoyance will account for many of those where the agents are said by Eustathius to have spoken out of their bellies, or breasts, from oak trees, or been "cast into trances in which they lay like men dead or asleep, "deprived of all sense and motion; but after some time returning to them-"selves, gave strange relations of what they had seen and heard."

The ancient Greeks and Romans regarded dreams as so many warnings; they prayed to Mercury to vouchsafe to them a night of good dreams. In this county we still hold the same opinions; but our country maidens, having christianised the subject, now invoke St. Agnes and a multitude of other saints to be similarly propitious. There are many other points of resemblance between the folklore of Lancashire and that of the ancients. Long or short life, health or disease, good luck or bad, are yet predicted by burning a lock of human hair; and the fire is frequently poked with much anxiety when testing the disposition of an absent lover. Many persons may be found who never put on the left shoe first; and the appearance of a single magpie has disconcerted many a stout Lancashire farmer when setting out on a journey of business or pleasure. In the matter of sneezing we are just as superstitious as when the Romans left us. exclaimed "may Jove protect you" when any one sneezed in their presence, and an anxious "God bless you" is the common ejaculation amongst our aged mothers. To the same sources we may probably attribute the apprehensions which many Lancashire people entertain with respect to spilling the salt; sudden silence, or fear; lucky and unlucky days; the presence of thirteen at dinner; raising ghosts; stopping blood by charms; spitting upon, or drawing blood from persons in order to avert danger; the evil eye; and a multitude of other minor superstitions. We possess much of all this in common with the Saxons and the Danes, but the original source of the greater portion is probably that of our earliest conquerors.

Divination by means of the works of Homer and Virgil was not uncommon amongst the ancients; the earlier Christians made use of the Psalter or New Testament for such purposes. In Lancashire the Bible and a key are resorted to, both for deciding doubts respecting a lover, and also to aid in detecting a thief. Appropriate verses are selected, according

to the nature of the case, and the key is tied upon them inside the book, the whole apparatus is then suspended from the fourth finger of each hand, a set form of words is pronounced, and the Bible turns round, or remains stationary, according as the lover is faithful or false, or the person suspected is innocent or guilty of the imputed crime. Divination by water affords another striking parallel. The ancients decided questions in dispute by means of a tumbler of water, into which they lowered a ring suspended by a thread, and having prayed to the gods to decide the question in dispute, the ring of its own accord would strike the tumbler a certain number of times. Our "Lancashire witches" adopt the same means, and follow the christianised formula, with a wedding ring suspended by a hair, whenever the time before marriage, the number of a family, or even the length of life, becomes a matter of anxiety.

Most nations, in all ages, have been accustomed to deck the graves of their dead with appropriate flowers, much as we do at present. The last words of the dying have, from the earliest times, been considered of prophetic import; and according to Theocritus, some one of those present endeavoured to receive into his mouth the last breath of a dying parent or friend, "as fancying the soul to pass out with it and enter into their own "bodies." Few would expect to find this singular custom still existing in Lancashire; and yet such is the fact. Witchcraft can boast her votaries in this county even up to the present date, and she numbers this practice amongst her rites and ceremonies. Not many years ago there resided in the neighbourhood of Burnley a female, whose malevolent practices were supposed to render themselves manifest by the injuries she inflicted on her neighbours' cattle; and many a lucky-stone, many a stout horse-shoe and rusty sickle, may now be found behind the doors, or hung from the beams in the cow-houses and stables, belonging to the farmers in that locality, which date their suspension from the time when this good old lady held the country side in awe. Not one of her neighbours ever dared to offend her openly; and if she at any time preferred a request it was granted at all hazards, regardless of inconvenience and expense. If in some thoughtless moment any one spoke slightingly either of her or her powers, a corresponding penalty was threatened as soon as it reached her ears, and the loss of cattle, personal health, or a general "run of bad luck" soon led the offending party to think seriously of making peace with his powerful tormentor. As time wore on she herself sickened and died; but before she could "shuffle off this mortal coil" she must needs transfer her familiar spirit to some trusty successor. An intimate acquaintance from a neighbouring township was consequently sent for in all haste, and on her arrival was immediately closeted with her dying friend. What passed between them has never fully transpired, but it is confidently affirmed that at the close of the interview this associate received the witch's last breath into her mouth, and with it the familiar spirit. The dreaded woman thus ceased to exist, but her powers for good or evil were transferred to her companion; and on passing along the road from Burnley to Blackburn we can point out a farm house at no great distance, with whose thrifty matron no neighbouring farmer will yet dare to quarrel.

A very large portion of the Lancashire folklore is identical in many respects with that which prevailed amongst the sturdy warriors who founded the Heptarchy, or ruled Northumbria. During the Saxon and Danish periods their heathendom had a real existence. Its practices were maintained by an array of priests and altars, with a prescribed ritual and ceremonies; public worship was performed and oblations offered with all the pomp and power of a church establishment. The remnants of this ancient creed are now presented to us in the form of popular superstitions, in legends and nursery tales, which have survived all attempts to eradicate them from the minds of the people. Christ, his apostles, and the saints, have supplanted the old mythological conceptions; but many popular stories and impious incantations which now involve these sacred names were formerly told of some northern hero, or perhaps invoked the power of Satan himself. The great festival in honor of Eostre may be instanced as having been transferred to the Christian celebration of the resurrection of our Lord; whilst the lighting of fires on St. John's eve, and the bringing in of the boar's head at Christmas, serve to remind us that the worship of Freja is not extinct. When Christianity became the national religion, the rooted prejudices of the people were evidently respected by our early missionaries, and hence the curious admixture of the sacred and the profane, which everywhere presents itself in our local popular forms of expression for the pretended cure of various diseases. The powers and attributes of Woden and Freja are attributed to Jesus, Peter, or Mary; but in all other respects the spells and incantations remain the same.

Our forefathers appear to have possessed a full proportion of those stern characteristics which have ever marked the Northumbrian population.

Whatever opinions they had acquired they were prepared to hold them firmly; nor did they give up their most heathenish practices without a Both the "law and the testimony" had to be called into requisition as occasion required; and even the terrors of these did not at once suffice. In one of the Anglo-Saxon Penitentiaries, quoted by Mr. Wright in his Essays, we find a penalty imposed upon those women who use "any witchcraft to their children, or who draw them through the earth at the meeting of roads, because that is great heathenishness." A Saxon Homily, preserved in the public library at Cambridge, states that divinations were used, "through the devil's teaching," in taking a wife, in going a journey, in brewing, when beginning any undertaking, when any person or animal is born, and when children begin to pine away or be unhealthy. The same Homily also speaks of divination by fowls, by sneezing, by horses, by dogs howling, and concludes by declaring that "he is no Christian who does these things." In a Latin Penitentialia, now in the British Museum, we find allusions to incantations for taking away stores of milk, honey, or other things belonging to another, and converting them to our own use. He who rides with Diana and obeys her commands, he who prepares three knives in company in order to predestine happiness to those born there, he who makes inquiry into the future on the first day of January, or begins a work on that day in order to secure prosperity during the whole of the year, is pointed out for reprobation; whilst hiding charms in grass, or on a tree, or in a path, for the preservation of cattle, placing children in a furnace, or on the roof of a house, and using characters for curing disease, or charms for collecting medicinal herbs, are enumerated for the purpose of pointing out the penances to be undergone by those found guilty of "such heinous sins." Nearly all these instances may be said to belong to the transition state of our folklore, and relate at once both to the ancient and the modern portions of our subject. We have seen that much the same practices were used by the Greeks and Romans; and it is a curious fact that many of the more important are still in vogue amongst the peasantry of Lancashire. Many persons will still shudder with apprehension if a dog howl during the sickness of a friend: dragging a child across the earth at a "four lane ends" is yet practised for the cure of hooping cough: fern seed is still said to be gathered on the Holy Bible, and is believed to be able to render those invisible who will dare to take it. We still have prejudices respecting the first day of the new year

black haired visitors are most welcome on the morning of that day; charms for the protection of families and cattle are yet to be found; and herbs for the use of man and beast are still collected when their "proper planets are "ruling" in the heavens. More copies of Culpepper's Herbal and Sibly's Astrology are sold in Lancashire than all other works on the same subjects put together, and this principally on account of the planetary influence with which each disease and its antidote are connected. Old Moore's Almanac, however, is now sadly at a discount, because it lacks the table of the "Moon's signs"; the farmers are consequently at a loss to know which will be healthy cattle, and hence they prefer a spurious edition which supplies the grave omission.

Within the last few months I have procured several lucky stones for the protection of cattle, from the "shippons" of those who, in other respects, are not counted behind the age; and I might have supplied myself with an ample stock of horse-shoes and rusty sickles from the same sources. during the last forty years the inhabitants of Lancashire have made rapid progress both in numbers and intelligence. They have had the "school-"master abroad" amongst them, and have consequently divested themselves of many of the grosser superstitions which formed a portion of the popular faith of their immediate predecessors; but there is yet a dense sub-stratum of popular opinions existing in those localities which have escaped the renovating influences of the spindle or the rail. As time progresses many of these will become further modified, or perhaps totally disappear; and hence it may be desirable to secure a permanent record of the customs and superstitions of the county. In attempting this I have put down little more than my own personal experience. Throughout life I have had ample opportunities for studying the "weak side" of our "Lancashire Witches," and while I hope to be pardoned for thus disclosing their secrets, I shall be happy to find that my labors are acceptable to this Society.

A SKETCH OF THE ORIGIN AND EARLY HISTORY OF THE LIVERPOOL BLUE COAT HOSPITAL.

By Mr. John R. Hughes.

(READ 5TH MAY, 1859.)

There may, perhaps, be required some apology for my introducing at the present time such a subject to the consideration of the Historic Society; but when I mention the fact that one hundred and fifty years are passed away since this most excellent and truly valuable institution was established—the anniversary of that event having recently been celebrated—I venture to hope that the simple sketch I have attempted, while evidencing its own incompleteness, may prove, to some extent, suggestive, and evoke some more worthy and complete history than any I can offer. I may also urge that to Liverpool, a comparatively modern town, the history of one hundred and fifty years ago, observed from whatever point of view, approves itself as one pregnant with wonder. pared with the neighbouring city of Chester, but eighteen miles distant, boasting so remote an origin, this epoch of time counts but small, and slight are the changes which Chester has undergone during this period. How strongly and strangely does Liverpool contrast with it! If we bridge over the time when the Blue Coat Hospital was established—the year 1709—to the present 1859, a span of one hundred and fifty years, and compare the population of Liverpool, then and now, we at once understand the mighty change which has taken place. In the former period Liverpool had a population of 8,500 inhabitants; in the present year, according to a recent writer, there are gathered within a radius of four miles from the Liverpool Exchange a population of 600,000 souls!

Fully to comprehend the motives urging to the establishment of the Blue Coat Hospital, it may be useful to trace briefly a few incidents of Liverpool history for some forty or fifty years antecedent to the

date of the founding of the Hospital. It cannot fail to strike every one that the great step onward in this town's prosperity dates from the period of the Restoration. The year itself which marked that event, 1660, bears witness of the dull state of Liverpool, inasmuch as it is on record, or to speak more truly, there is no record at all of either a single marriage or death occurring during the whole of that year; but immediately following upon this state of things, to use the words of the historian of Liverpool, "during the (next) period "of fifty years the town increased in population, commerce, and "wealth, with a rapidity which had never been previously known, so that "by the close of the half century it had become the third port in the "kingdom." * Corroboratory in some degree of this rapidity of rise, it may be worth mentioning that in an edition of "Old Speed," printed in 1676, which may be found in the Historic Society's library, entitled "Epitome of Mr. John Speed's Theatre of the Empire of Great "Britain, and of his prospect of the most famous parts of the world," no mention is made of Liverpool in the two general maps of the country which accompany his work. Can it be a stretch of the imagination to suppose that Liverpool grew in importance while "Old Speed" prepared and elaborated his work for the press?

It was not till four years later than the issuing of the work referred to, namely, 1680, that Liverpool had so far extended itself as to get to the east side of the pool; the site of which is now occupied by Paradise Street and its continuations. The first house built is still standing (in very excellent condition) in School Lane, a little below the Hospital, at the corner of Manesty's Lane, and is the property of the Blue Coat Hospital, forming part of the munificent gift granted to it by the late John Huddleston, Esq. It was built by Mr. Dansie, a Liverpool merchant of the seventeenth century, who had his country seat on the site of the present Dansie Street, out of Russell Street.

We have in the above statement an interesting evidence of the extension of Liverpool within twenty years of the restoration. Twenty years more lead us to 1700, when a more rapid and much greater extension had taken place. At this time, and dating from the 24th June, 1699, the town, by an Act 11 William III, was erected into a separate and

^{*} Baines's "History of Liverpool," p. 323.

distinct parish from Walton, to which hitherto it had been subordinate, and the same act provided for building, by assessment, a new church beyond the pool, to be called St. Peter's. The memorial of the inhabitants, applying for this act, set forth that the town was much increased, both in trade and population, that it had but one chapel, insufficient to the growing wants of its thriving community, and confirmed these assertions by a statement that it paid £50,000 per annum to the king. We have thus, in 1700, the town presented to our view as thriving, greatly on the increase, with one church, in possession of an act for building another, and having a population of 5,714 inhabitants.

The foundation stone of the new church, said to be the first built in Lancashire since the Reformation, was laid in the year following; and the rectory being a mediety, the chapel of St. Nicholas and this new church of St. Peter were made one parish church, the rectors officiating on either side the pool. The first rectors were the Rev. Robert Styth and the Rev. Wm. Atherton, the former of whom became the first treasurer, as he had been among the most active originators of the Blue Coat Hospital, which took its rise in the period immediately ensuing.

It was consequent upon the prosperity of which I have given but an imperfect sketch that the Blue Coat Hospital was founded, in the year 1708, and its first trustees chosen 13th January, 1709.

Between the years 1700 and 1709 the population of the town had increased fifty per cent., standing relatively, as before stated, 5,714 in the former, to 8,500 in the latter. Of tonnage in 1709, the entry inwards records 374 ships, 14,574 tons, and outwards 334 ships, 12,636 tons. The whole tonnage of England this year was 243,693 tons. This year, also, the first vessel sailed for Africa, initiating a trade destined to have so large an influence on the wealth and prosperity of the town. And following these altered and hopeful circumstances of the port, which was possessed as yet of but an unformed haven, we witness the commencement of a first dock, first of that series for which Liverpool is now so far famed.

These evidences of prosperity well prepare us for the testimony of the records of the Hospital, as to the causes of its foundation.

We there read: - "That the inhabitants of the borough and port

"town of Liverpool, considering the many blessings God has been pleased "to bestow upon the said port town, and that he hath in so signal a "manner preserved and protected their ships, trade and endeavours, to and beyond the seas, that the same, for many years, hath been enlarged and carried on very successfully, and the adventurers and inhabitants of and in the said port town very much increased, and that such and so many great blessings do in the most especial manner require the most humble and sincere acknowledgments, and that the same cannot be more fully made appear than by promoting so good a work;" determined to found a "charity school," for educating poor children in the principles of the Established Church.

It would seem that the land upon which the School was built was granted by the Corporation for that purpose, for we find by the first Corporation deed, made the 24th August, 1722, recital made of the circumstances attending it in the following terms: -- "That the "worshipful the Mayor, Baylives, and Burgesses of the Burrough, "Corporation, and Port Town of Liverpool, in the County Pallatin of "Lancaster, on the one part, and the Reverend the Rectors of the new "Church and Parochial Chappel of Liverpool aforesaid, for the time being, "Sir Thomas Johnson, Knt., Richard Norris, and Thomas Willis, Esqrs., "all of Liverpool aforesaid, upon the other, that whereas, upon the repre-"sentation of the late Rev. Robert Styth, one of the Rectors of the said "new Church and Parochial Chappel, of Liverpool aforesaid, in the month "of December, one thousand seven hundred and eight, to the worshipful "the Mayor, Aldermen, and Common Council of Liverpool aforesaid, "intreating them to set out and give a convenient piece of ground for "building a School, for teaching poor children to read, write, &c., in which "he recommended as the most useful kind of charity, and much wanted "in the said town, and therefore hoped would meet with due encourage-"ment and hearty approbation, and would, in a short time, be erected, and "a competent salary provided for a master; on a certain piece of waste "ground, part of the waste of and belonging to the said Mayor, Baylives, "and Burgesses, lying and being at or near the south-east corner of St. "Peter's Church yard, in Liverpool aforesaid, on the south side of a new "street, passage, or lane, which runs along the south side of the said "church yard, now called School Lane, which said certain parcel of "ground, as it is now, walled and built, was by order of council of the sixth day of January, in the said year, one thousand seven hundred and eight, viewed and afterwards set out for the purpose aforesaid, and that thereupon several charitable and well-disposed persons did contribute generously towards the beginning and carrying on the said under-taking."

The School that "would in a short time be erected," mentioned in the body of this grant, was built in 1708, and was that in which, on the 13th January, 1709, the first meeting of contributors was held, for the election of treasurer, trustees, and a master, and which subsequently was used as a "Free Grammar School." Excepting what we gather from the very general terms in the latter clause of the deed, that "several charitable and well-"disposed persons did contribute generously towards the beginning and "carrying on the said undertaking," it is by no means clear from what source the funds arose by which this School was erected. There is no record of it among any of the books at present in the Hospital, while the names of all the contributors from the first meeting in 1709, with all disbursements, are strictly recorded down to the present time. We have, however, in a simple and modest narrative, written soon after by Mr. Bryan Blundell, who may justly be regarded as its founder, some solution of the difficulty as to the little School house first erected; he writes-"A narrative of the rise and progress of the "Charity School, or Blue Coat Hospital, in Liverpool, made by Mr. "Bryan Blundell, treasurer, from the year 1709 to near the time of his "death, 1755." He relates "how wonderfully the good providence of God "has done for this School since its institution in the year 1709." He here plainly refers to it after its erection.

"Mr. Robert Styth, one of the rectors at that time, and myself, were "very intimate. I was then master of a ship in the foreign trade. We "agreed to use our best endeavours to found a charity School, and applied "to the Mayor, and some of the most respectable inhabitants, who joined "in the business, and subscribed, some twenty, some thirty, some forty "shillings a year, to the amount of £60 or £70 per annum. We then "built a little school house, which cost £35, and appointed a master, at "£20 per annum, which was paid out of the money collected at the "sacraments, and took fifty poor children into the said school, clothed, and

"gave them learning. Mr. Robert Styth was then made treasurer, and I went to sea on my employment, telling Mr. Styth that I hoped to be giving him something every voyage for the school."

It is evident from the foregoing narrative that £35 was the cost of the erection of the School house of 1708, the land, according to the deed, being granted free; but we have still only the same general assertion with respect to the contributors which was contained in the deed. In the absence of any positive payment recorded from the School funds, I have thought it necessary not to accept too readily any general statements, the more so as I could have wished to find an exact date for both payment and erection. I have made a careful search into the matter, and it appears to my mind pretty evident that Bryan Blundell himself paid the £35 for the School, forming a part of the £250 which he states he gave to it. The School records, as I shall have occasion to shew at a later stage, state that he gave between the years 1709 and 1713 £250 to the School, and yet there is only brought a total, and that at various times, of £215 into the Hospital Cash Book; the difference of £35 in these two items would be paid for the little School house. In this way may we account for the omission of £35 paid by Bryan Blundell towards the School, and the like sum disbursed for a first School house, both items being absent from the accounts.

This circumstance helps us additionally to regard Bryan Blundell in the light of "founder" of the Blue Coat Hospital; hence, also, we have no more exact date than the general one of 1708 as the period of the founding and erection of this little School house on the common.

It was from this School, first used for our Blue Coat Hospital, that the "new street, passage, or lane, which runs along the south side of the "church yard," took its name of School Lane. I am induced to mention this because some Liverpool topographers have stated that the name was derived from an "ancient Grammar School" previously erected here. This may reasonably be disproved by the terms of the deed, as well as by their own shewing, that it was only some twenty-nine years prior to 1709 that even the first house was built beyond the pool; and it is also disproved by the knowledge we have that "the little School" afterwards became the "Free Grammar School," the testimony of which, and the causes which led to its being so used, may be gathered

from the following extract from the Hospital charter, granted by the Duchy Court of Lancaster, in 1739:- "Whereas at a meeting, held in the said "School, the 15th day of September, anno Domini one thousand seven "hundred and fourteen, Bryan Blundell, of Liverpool aforesaid, merchant, "was chosen and appointed treasurer, the said Robert Styth being then "deceased, and also elected one of the trustees of and for the said School, "and that by the generous contributions of the said Bryan Blundell, and "others, they were enabled to enlarge the said School and buildings, and "to take in a greater number of poor boys and girls, which was done "accordingly, and for that purpose several purchases were made of houses, "buildings, and lands adjoining thereto, and the said School and buildings "are now completed and finished in a very beautiful, substantial, and "commodious manner, and are called the Blue Coat Hospital, in Liverpool, "and there are generally kept and maintained therein about 46 boys and "14 girls, that the buildings of the said Hospital or Charity School being "of a larger extent than necessary for the habitation of boys, girls, "masters, mistresses, and servants, some parts thereof are, and have been "for some years, set off at annual rents, to increase the income of the "said charity, particularly part thereof to the overseers and churchwardens "of Liverpool aforesaid, to be used as a workhouse for the poor, of the "yearly rent of £80, and another part to the mayor, bailiffs, and burgesses "of Liverpool aforesaid, to be used as a 'Free Grammar School,' at the "yearly rent of Seven Pounds."

It may not be out of place here to notice briefly the connection of the Corporation with the "Free School," and the cause of their paying to the Blue Coat Hospital a yearly rent for the same. We learn from the records of the town, that in the early part of the reign of Henry VIII, in 1515, one John Crosse endowed the Chauntry of the Altar of St. Catherine, being the fourth Liverpool chauntry, with certain lands and rents, "to "celebrate there for his soule, and to doe one yearly obit, and to distribute "at the same time three shillings and four pence to poore people, and also "to keep a School of Grammar free for all children bearing the name of "Crosse, and poor children." The grant is for ever. At the time of the dissolution of religious houses, in 1533, Sir Thomas Hesketh and Mr. Ashurst were appointed commissioners, and gave for return of this chauntry: "Humphrey Crosse is the incumbent, being fifty years of age, and hath

"for his salary £6 2s. 10d., the profits thereof, besides his salary, is £2. "The ornaments belonging to it worth £3, and twelve ounces of plate." As two of the Liverpool chauntries were of the foundation of the House of Lancaster they fell to the crown; but there was conveyed, about this time, from the Duchy Court of Chancery, in respect of this Chauntry of St. Catherine, a much similar sum to what had been named, to keep and maintain in Liverpool a "Free Grammar School;"* and it was this grant made by the Duchy Court, through the Corporation, which the trustees of the Blue Coat Hospital received for rental, first paid into the School funds in 1720, and continued to the time when it was pulled down in 1806–7, the site of it being then required for further erections to the Hospital.

It is doubtless from a mixing of the circumstances which I have narrated that the mistake was made, of supposing that School Lane did not take its name from the School first used for our Blue Coat Hospital.

I have dwelt, perhaps, at tedious length in endeavouring to establish a few facts relative to the first school of 1708, and I can only, in apology, say that finding so little known of it, in every direction I have sought, I have been the more careful to note down everything bearing upon it.

Proceeding with the records of the Hospital, which are sufficiently clear from the period of the first meeting in 1709, although no minutes of the earlier meetings are found in any of the books at present in the Hospital, I find that of the contributors who first met in the newly erected School there were present, "The Mayor of Liverpool for the time being, William Clayton, Esq., Thomas Willis, Jasper Maudit, Esq., "Alderman John Seacome, Ald. James Benn, Ald. John Peaceland, Ald. "William Hurst, Ald. William Webster, Ald. Sylvester Moorcroft, the Rev. "Robert Styth, and several others;" that "a master was elected, and the "said Robert Styth was appointed treasurer, and also the Worshipful the "Mayor of Liverpool (John Earle, Esq.), the Rectors for the time being "(Robert Styth and John Richmond), the said Sir Thomas Johnson, Knt.,

^{*} The "Free Grammar School" of the foundation of John Crosse occupied, in 1673, a site by St. Nicholas' Church. "Here is also a great piece of antiquity, formerly a "chappel, now a Free-School, at the West end whereof, next the river, stood the statue of "St. Nicholas (long since defaced and gone), to whom the mariners offered when they "went to sea." Vide Blome's "Britannia," ed. 1673, p. 134.

"Richard Norris, William Clayton, Jasper Maudit, Thomas Willis, and "John Cleveland, were chosen and appointed trustees of and for the said "School, and that the same was continued and managed by them, with "and out of the charitable contributions of sundry inhabitants of the said "borough and port town."

It is a little remarkable that the name of Bryan Blundell does not appear as being present at this meeting, and more remarkable still that he is not one of the trustees, nine in number, first chosen for the School; but it may, perhaps, be accounted for from the words of his narrative, already quoted—"I went to sea on my employment:" possibly he may have been away at this time. Notwithstanding, his name appears in the list of first subscribers, dated 3rd March, 1709, of which the following is a copy, which I have extracted from a MS. volume, kindly lent me by Anthony Swainson, Esq., who filled the office of treasurer to the Hospital from 1838 to 1848, and which, through the courtesy of Mr. Wood, the head master of the School, I have been enabled to compare with the original lists in the Hospital. I would also mention, that by laying under contribution such works as the "Norris "Papers," the "Moore Rental," and "Gregson's Fragments," together with the records of the Hospital; to which I may add, in anticipation, the forthcoming volume of the Rev. Dr. Hume, promising, among other matters, a new "directory" of 1708, &c., we can glean a few particulars of their families and pursuits.

Jno. Earle, Esq., Mayor, 40/. Sir Tho. Johnson, 40/. Rd. Norris, Esq., 40/. Wm. Clayton, Esq., 50/. Jasper Maudit, Esq., 20/.

Jn. Seacome, Esq., 20/.

Tho. Willis, Esq., 40/. Ald. Jas. Benn, 20/.

Ald. Jn. Cockshot, 20/.

Jn. Cleveland, Esq., 40/.

Ald. Wm. Webster, 20/.

Ald. Silvester Moorcroft, 10/.

Ald. Rd. Houghton, 20/.

Ald. Wm. Hurst, 20/.

Mr. Francis Goodrich, 10/.

Mr. Hy. Taylor, 10/.

Mr. Ralph Peters, 20/.

Mr. Wm. Swarbreck, 10/.

Mr. Tho. Seacome, 10/.

The Rev. Mr. Rt. Styth, 30/.

The Rev. Mr. H. Richmond, 20/.

The Rev. Mr. Tho. Welsh, 10/.

Mr. Wm. Squire, 20/.

Mr. John Plumbe, 20/.

Doctr. Jn. Tarleton, 20/.

Mr. Wm. Rollins, Sen., 10/.

Mr. Jn. Wainwright, 10/.

Mr. Josh. Eaton, 10/.

Mr. Geo. Tyrer, 30/.

Mr. Abram. Langley, 20/.

Mr. Jas. Tildsley, 10/.

Mr. Peter Hall, 10/.

Mr. Foster Cunliffe, 10/.

Mr. Edwd. Tarleton, Sen., 5/.

Mr. Tho. Coore, 10/.
Mr. Bryan Blundell, 50/.
Mr. Jas. Gibbons, 10/.
Mr. Jn. Blackburne, 30/.
Mr. Hy. Brown, 10/.
Mr. Rt. Lowe, 10/.
Madm. Margt. Clayton, 10/.
Madm. Jane Lyddale, 20/.
Madm. Elinor Clayton, of Liverpool, 10/.
Madm. Elinor Clayton, of West Indies, 10/.
Mr. Danl. Danbers, 30/.

Mr. Gilbert Levesley, 10/.

Mr. Jn. Fells, 10/.
Mr. Jn. Murray, 10/.
Mr. Geo. Ryley, 10/.
Mr. Tho. Robinson, 10/.
Mr. Rd. Kelsall, 10/.
Mr. Adam Bury, 10/.
Mr. Jas. Townsend, 5/.
Mr. Rd. Gildart, 10/.
Mr. Jn. Parr, Merchant, 10/.
Mr. Danl. Willis, 10/.
Mr. Rt. Shields, 10/.

Mr. Hy. Chorley, 10/.

They make a sum total of £50 10s., which was augmented by £1 benefaction from Mr. Josh. Tuen, the interest of £20 left by Joshua Marrow, 24s., and a collection of £10 9s. $2\frac{1}{2}$ d. in the new church (St. Peter's), upon new year's day, 1710. The expenditure for clothing and other necessaries, exclusive of diet, which was not then provided, for forty boys and ten girls, the number at first placed upon the foundation, amounted to £35 9s. $9\frac{1}{2}$ d., being at the rate of 14s. $2\frac{1}{4}$ d. per child. There thus appears a sum of £27 13s. $5\frac{1}{2}$ d. in Mr. Styth, the treasurer's, hands, after the disbursements of the first year.

It would be a laborious and useless task to enter further into figures, year by year, and I will only cite a few particulars which I conceive worthy of notice during the remaining part of the treasurership of Mr. Styth, which closed only with his death, in December, 1713. Before so doing I would remark, that while Bryan Blundell may be considered the founder and chief benefactor to the Blue Coat Hospital, as his own modest and simple narrative, the terms in which he is spoken of in the extract from the charter, both already cited, and the testimony of the School records, to which I shall immediately refer, sufficiently prove, it cannot be denied that a very large part in the founding of the Blue Coat Hospital was filled and acted by the first rector of Liverpool, the Rev. Robert Styth. Without invidiousness it may fairly be stated, that to his auspices, to Mr. Blundell's self-denying zeal and generosity, and to their mutual fostering care it was owing that this admirable institution arose. It remains among us at once a monument of their piety, and a lasting benefit to our town.

The particulars I have to notice are, a first mention made of "a master," Wm. Trenow, on the 2nd November, 1711. The absence

of any earlier mention is accounted for by the want of minutes, to which I have before adverted; none being kept of the earlier meetings. A little later on, in 1713, we have an entry, "Paid master for teaching a poor boy "to write, 2/;" in the same year, also, under date August 31st, "To cash "received of the master £20 5/," and again "November 6th, £6 15/." This would doubtless be earnings of the children employed in manual labour during a part of their school hours. There is no direct evidence of their being so employed at this time, but from the nature of the entry, and the fact that in after years they were employed, first in cotton spinning, stocking weaving, &c., and then in pin making, it is probable that this money was so derived.

The above is the only mention made of a master during the treasurer-ship of Mr. Styth; there is no record of any payment of salary until the succeeding treasurership, the absence of which may confirm Bryan Blundell's statement, that it was paid out of the sacrament money.

The chief, and indeed almost the sole donor to the school, apart from the annual subscribers, during Mr. Styth's treasurership, 1709-1713, appears to have been Bryan Blundell. He is named as having given, 11th May, 1711, £100; 2nd February, 1712, £50; 4th April, 1713, paid bill on Mr. Thomas Robinson, being his part of the Pemberton's prize, £25; November 16, "a bill," £40; in all £215, which with £35, of which there is no record, made up a total sum given of £250. have already endeavoured to shew that this sum of £35 was paid by him direct for a school house, and thus no entry was made of it in the school funds. That he gave £250 is proved by the following entry: "1713. Bryan Blundell having given £250 to be paid out to interest "this two years past, being put out £100 to Parr, and £90 to Mr. Worrall, "brings in £11 8s. per annum, as above account. So hath for that reason "with drawn ye 40/ per annum he paid before, and designed to give to "ye School as it pleases God to bless him in his voyages." For some years from this date his name, which had appeared on the subscription lists from the very first meeting in 1709, is accordingly omitted.

After Mr. Styth's death, in 1713, Mr. Blundell was chosen, on the 15th September, 1714, at a meeting held in the School, to be treasurer in his place, and was at the same time elected a trustee. We have also, in the cash book, an account of bonds and notes

delivered to Bryan Blundell, by the executors of the late Rev. Mr. Robert Styth, for the "rise" of the Charity School. James Hartley's bond, £100; John Worrall's bond, £90; James Hartley and Robert Webster's bond, £20; Mr. Parr's bond, £100; total, £310: together with "a note from Henry Brown and Thomas Robinson, the "executors of the Rev. Mr. Styth," upon the collectors of the parson's tax for 1713, in favour of Mr. Blundell, for £28 14s. 9¾d., being the balance in hand of treasurer's accounts, to which was added, to be paid from the same source, a legacy of £50 from the rector.

Mr. Blundell's narrative gives us a little additional information at this point, and accounts for the length of time which elapsed between Mr. Styth's death, in December, 1713, and his appointment to succeed him, 15th September, 1714. "In 1713 Mr. Styth died; from "1709 to the time of his death I had given him £250 on my several "voyages, £200 of which he had put out to interest. When I came home "and found he was dead it gave me much concern for the School, as Mr. "Richmond, the other rector, was much indisposed at times, and not able "to undertake such a charge. I therefore determined to leave off the sea, "and undertake the care of the School, and was chosen treasurer in "1714, at which time there were £200 at interest, which was all the stock "the School had."

There is an observable difference between the amount of "stock" recorded in the Hospital books, and that named by Mr. Bryan Blundell; but this disparity can be satisfactorily reconciled by assuming that Mr. Blundell esteemed £200 alone to be what we must call permanent stock.

In the early part of Mr. Blundell's treasurership, 1715, entry is for the first time made of sacrament money received, "per Mr. Thomas Hurst and "Mr. Seel, as churchwardens, £32 7s. 4d." In the same year, "to cash "from Mr. Branker and Mr. Hamer, sacrament money collected in several "years, £76 14s. $9\frac{1}{2}$ d." Another entry we have at this time, "Cash "collected in the gallery in the Exchange, £17 13s." Among the disbursements this same year, "To Mrs. Lloyd teaching the girls to sew and "knit, £6;" this appears to have been her yearly stipend.

In the course of this year preparations were made for the erection of a suitable building for lodging, &c., of the children, by burning Bricks, preparing Timber, &c.

The cause for this may be best gathered from Bryan Blundell's own words:--"In a little time, I saw some of the children begging about the "streets, their parents being so poor as not to have bread for them, which "gave me great concern, insomuch that I thought to use my best en-"deavours to make provision for them, so as to take them wholly from "their parents, which I hoped might be promoted by a subscription. I "therefore got an instrument drawn out for that purpose on parchment, "went about with it to most persons of ability and many subscribed hand-"somely. On the strength of which I went to work, and got the present "charity school built, which has cost between two and three thousand "pounds, and was finished in 1718, at which time I gave for the encourage-"ment of the charity, £750, being a tenth part of what it pleased God to "bless me with, and did then purpose to continue to give the same propor-"tion of whatever he should indulge me with in the time to come, for the "benefit and encouragement of the said charity." He adds, "So great "has been the mercy and providence of God in prospering me in business, "that I have made up the £750 to £2000, which I have paid to the use of "the school; and my children, (six in number, the youngest of them now "near thirty years of age,) are so far from wanting, or being the worse for "what I have given to the school, that they are all benefactors to it, some "of them more than £100 at a time. I may truly say, whilst I have been "doing for the children at the school, the good providence of God hath "been doing for mine, so that I hope they will be benefactors to this "charity when I am in my grave."

The "instrument, drawn out on parchment," to which Bryan Blundell refers, is now preserved in the Hospital, and is marked No. O, and I notice from a remark made upon it that it was exhibited 16th December, 1761, before the Commissioners on the execution of a Commission of Banks ruptcy against Owen Pritchard, who had filled the office of Mayor of Liverpool in 1744, and whose name was entered as a donor of £35; of which the Hospital received £28 14/ from the estate.

As the preamble of this roll is a little curious, while it instructs as to the Hospital history, I do not hesitate to reproduce it in this paper:—
"Whereas profaneness and debauchery are greatly owing to a gross ig"norance of the Christian religion, and especially among the poorer sort,
"and that nothing is more likely to promote the practice of Christianity

"and virtue, than an early and pious education in youth: and whereas the "charity schools erected in the several parts of this kingdom have "abundantly improved the morals of poor children educated in them to the "Honour of God and the benefit of the nation. And whereas many poor "people are desirous of having their children taught but are not able to "afford them a Christian and useful education; and there being children "whose parents are dead, and no friends left to take care of them, must "unavoidably come to beggary and ruin both of body and soul, if not "prevented by the care of some charitable and well-disposed people, and "there being now a charity school, accommodated with salary and other "subscriptions to the finding fifty boys and girls with clothes and learning, "yet find that whilst the children are forced to go to their Parents for "meat, some of which having not meat to give them, but send them out a "begging for it, by which the children get such habits of idleness, and "meet with so many diversions that they either neglect the school, or "profit but little by coming; so that the means that is used whilst on this "footing is not sufficient to effect what is proposed, nor can anything be "proposed so effectually as by raising a fund which might be sufficient to "find them with meat, drink, and lodging, in one entire house, by which they "would be kept under such discipline as by the blessing of God, might "have the desired effect. And in consideration of so great a good, they "whose names are then under-written, do hereby agree to pay the several "respective sums of money against their names respectively subscribed "towards the said fund, for finding them with meat, drink, apparel, "and lodging, and teaching poor children in the said school to read and write, "and arithmetick, and instructing them in the knowledge and practice of "the Christian religion, as professed and taught in the Church of England; "and for learning them such other things as are suitable to their condition "and capacity.—1717."

The foundation stone of the new Buildings, to which the inhabitants were thus invited to subscribe, had been laid 3rd May, 1716. These buildings now form the ancient part of the Hospital, including the Chapel, over which is seen the inscription:—"Christianæ charitati promovendæ"inopique pueritiæ ecclesiæ Anglicanæ principiis imbuendæ sacrum. "Anno Salutis MDCCXVII."

When completed in 1725, though partly they might be said to be

finished and opened in 1718, they had cost the sum of £2,288 14s., which with the exception of £500, a balance in the Treasurer's hands, was all raised by donations, the names of the donors, as well as other subscriptions extending to 1747, being contained in the parchment roll to which I have referred.

From a detailed statement of the cost of the erection, had in the Hospital, I transcribe a few items which appear to me worthy of notice.

There is entered the cost of making a Kiln in 1715, as follows:—

| Jno. Moore for Soil, getting Sodds 5/4, and Ca | artage £0 | 13 | 8 |
|--|-----------|----|--------|
| Jno. Yates for 25 loads of Coal | 3 | 19 | 0 |
| Jno. Burch for 2 work of Slack | 1 | 5 | 0 |
| Wm. Webster for 11 loads of Coal | | 9 | 0 |
| Jno. Narland for Coals | 0 | 19 | 6 |
| 5 Loads of Turf at 2/6 \ load | 0 | 12 | 6 |
| Jno. Brooks for 2 loads of Slack | 0 | 5 | 4 |
| Tho. Glover for 8,200, and Carting for Caseing | 4 | 0 | 0 |
| Drink * for the men at making and burning Br | rick 0 | 4 | 6 |
| Rt. Bannister, kiln making, and casing 93,000 | Bricks 19 | 0 | 9 |
| | £32 | 9 | 3 |
| , "Making Brick in the year 1716." | | | ndepen |
| · To Sodds, Cartage, and Soil | £0 | 12 | 0 |
| Coals and Slack for a Kiln, open fires, per note | | 9 | 4 |
| Drink at sundry times, and when burning | | 5 | 6 |
| Rt. Bannister for making and burning 74,285 | 16 | 18 | 0 |
| | | | |

One thing is clearly deducible from the above, namely, that the bricks used in the erection of the edifice must have been burnt on the spot, the clay being found there also. This appears the more probable when we reflect that the Hospital even ten years later, in 1725, according to the view of the town in "Herdman's Ancient Liverpool," occupied the extreme east portion of the town, all beyond it being green fields and pasturage. Clay pits could also thus, without inconvenience, be dug in the extreme outskirts of the town. The conversion of the "Ladies' Walk," which was part of the common, † and the site

£27 4 10

Also

^{*} This item of "drink" seems no unimportant one in the account, as it frequently occurs.

⁺ The common comprised the area bounded by what was the pool, (now Paradise Street,) by Church Street, Bold street and Duke Street.

of the present Parr Street, some half century after this period, into brick-fields, and the reputation which the clay had of being the best in this part of the country for the purposes of brick making, may also bear out the statement.

Among other items in the cost of erection, we have under date, August 18th, 1716, "The town carts for carting Mr. Hurst's joice 4/6;" "The "master in consideration of spoiling garden 10/;" "23 loads water to temper May 21st, 1717, "Labourer 1 day, and drink, rearing one " clay 7/8." "part 10/;" "Ditto, and drink, rearing the other part 6 weeks past £1 5/;" "A parcel of joice from Chester as per bill £26 16/9." December 7th, "Peter Orm for drying dales at Salthouse 12/6." April 9th, 1718, "40½ "cases of glass from Bristol £40 7/;" "Half freight, cartage, porterage, "and postage £2 8/;" "Parcel of dales per the ship 'Bootle' £68." Dec. 8th, 1718, "Wm. Jones for cutting coat of arms £7 10/;" 22nd, "Jane "Orm and Glasshouse men for dry dales 3/6;" "Jackson bringing the "plate from London and oil 4/6;" May 2nd, "Wm. Jones carving 4 stone "figures £7." August, 1719, "Horse hire and expense going to Manchester "14/9." 1720, "Jno. Wortley for seeds and gardening 13/;" "Drink to the "workmen, and smiths at gates 10/;" "64c. 2q. 8lbs. iron for palisades and "gates, at 28/;" "Enlarging Free School £105 0/5½;" "½ of the ship "' Bootle' fitted out, £80, given by Tho. Bootle, Esq.;" " 1/3 of cargo for "said ship, at Liverpool, dry goods, £17 0/2½;" "å of a loading rock salt "for said ship £14 9/10;" "\frac{1}{8} cargo in Ireland for Jamaica £86;" "Wages "advanced and other charges after account made up £1 5/." Aug. 11th, 1721, "Sundries to Jno. Crompton, per bill, £6 17/7, but he was pleased "to give £5 to the School, £1 17/7." 1722, "Jn. Brooks raising foundation "of new houses £6 6/." 1726, "Digging a cellar, laying floor, a pump and "sundries at Mr. Erlam's House, per bill, £10 19/7."

Entry is also made of "Wm. Trenow, a year's salary, ending 1st May, "1717, £10;" and the like sum he continues to receive during the whole period of the erection until his death, which took place in 1723. Wm. Trenow, from an entry in another place, seems to have been the school-master, and this is the first account of any payment being made him through the school funds.

While these efforts were made in erecting a house where the children might effectually be taught "the knowledge of the Christian religion,"

provision was at the same time being made to have a suitable seating place for them in the parish church. In order that this might be judicially effected, the trustees obtained a Faculty from the Consistory Court of Chester, bearing date 3rd October, 1717, by which they were empowered to erect a new gallery at the west end of the church, so that the children might, as the document expresses it, "stand, sitt, kneel and "hear divine service and sermons in the same." This gallery continues at the present day to be used for the purpose by a portion of the inmates of the Hospital.

I would here notice the year 1717 to be the last in which the Mayor's name, as such, appears as heading the yearly subscription lists, which up to this time from the first meeting in 1709, had been customary.

We next have, in 1718, an opening of the school, necessarily partial, as the edifice was only thoroughly completed in 1725; and an amount is entered, "cash collected at opening the school," £13 12/. In the year succeeding, we have "cash received from the present churchwardens, "£18 10/; do., the ensuing ones, £1 10/; £20;"—this would be "sacra-"ment money," towards the master's salary, and the same "fixed" sum continues to be paid during many succeeding years. A first payment is at this time recorded to "Theophilus Price, schoolmaster, salary, £40," Wm. Trenow being also still kept at £10. Entry is made of this new master, "his expenses from London, £1 1/." He seems also to have been allowed £7 "for dyet one year." In 1720 is received the first rent of the "Free Grammar School," being entered, "by a year's rent from the old school, £11." This would include a house; for later on, in 1730, there is named, "by a year's rent for the school, ye house empty, £7." Ellen Bibby, at this time also, succeeds Mrs. Lloyd as schoolmistress; and I find, a few years after, when this new mistress bears witness to a will made by Wm. Trenow, that she was not able to write, but marks the cross in witnessing. She doubtless would teach principally sewing and knitting, and perhaps reading. In our own day one might, perhaps, though I trust it would be difficult, find an Ellen Bibby in some rural hamlet of England! The trustees endeavoured this year to obtain a charter for the school. For this purpose £20 was forwarded to Sir Thomas Johnson, the then representative in Parliament,

and trustee for the school; but in 1726—this would be after Sir Thomas sailed from England for Virginia, whither he went in the capacity of an excise-officer, at a salary of £80 per annum—we have it recorded, "to Sir "Thomas Johnson, cash sent in 1720 to procure a charter, had never "any account or cash back, £20;" also directly under, "to Mrs. Wisdom, "1729, charges about a charter, as per account, £20 2/3." It appears, notwithstanding, that application was made to Government for a charter, but, the school not being on a royal foundation, it was refused.

Wm. Trenow died in 1723, leaving by will, dated 27th February, $\frac{1722}{3}$, all that he possessed to the school. Of that will the following is an abridged copy:—

"In the name of God, Amen. I, William Trenow, &c., do make and ordain this my present last will and testament in manner, &c.

"First, I will that my debts and funeral charges shall be paid and dis-"charged. Item. It is the full purport and desire of my soul that my " most esteemed and most affectionate friend, Mr Alderman Blundell, Trea-"surer of the charity school, in the corporation of Liverpool aforesaid, imme-"diately after my decease, shall have full power and possession of what "notes, bonds, or moneys shall be left or found in my desk or chest, all "to be appropriated to the use and benefit of the said charity school and "children thereto belonging. And I will likewise that Mr Blundell afore-"said shall have power to sell all my wearing apparel, unless that suit "which I wear every day, which I give and bequeath to Robert, younger "son to Ellen Bibby, mistress of the charity school before mentioned, as "also a broadcloth coat and vest, to William, son of my cousin Witherin-"ton, if accepted; otherwise, to be applied and sold for the use of the "charity school and children aforesaid. Item. All the goods in my room "or lodging, of what nature and kind soever, I give to the use and for "the benefit of the said charity school, and to be applied to the most "useful purposes that my very good friend, Mr. Alderman Blundell, shall "think fit—whom I have appointed whole and sole executor of this my "last will and testament. * * * *

" WILLIAM TRENOW.

[&]quot;Signed, &c., in the presence, &c.

[&]quot;Joshua Erlam.

[&]quot;ELLEN E BIBBY.

[&]quot;THEOPHILUS PRICE."

Agreeably to this will possession was taken of his effects, and the school paid for his burial.

The account of his effects, burial, &c., is somewhat interesting, and is as follows:—

| Cr. | | | | Dr. | |
|-------------------------------------|------|--|-----|-----|---|
| By Mr Bryan Blundell's note for £30 | 0 0 | To Jos. Banks, paid parson's | | | |
| ,, Thos. Massie's and Thos. | | dues for ye grave, for ye | | | |
| Jump's bond and interest 10 | 5 0 | bell, for ye stone and | | | |
| " Salary due to Mr. Trenow | | cutting | £1 | 2 | 8 |
| when he died 5 | 0 0 | ,, Jos. Banks, for Mr. Tre- | | | |
| " A debt due from Jas. Banks 1 | 3 0 | now's diet to ye time he | | | |
| ,, do. Ellen Bibby 1 | 0 0 | died | 1 | 7 | 0 |
| " Cash found in his chest and | | ,, Mrs. Ellen Bailey, for grave | | | |
| desk 23 | 6 9 | clothes | 0 | 9 | 0 |
| " Plate, household goods, and | | , Lawrence Rigby, for coffin | 0 | 9 | 9 |
| wearing apparel, as per in- | | ,, Ellen Bibby, for sundries | 0 | 6 | 8 |
| ventory 16 | 18 0 | ,, Mrs. Mary Gibson, for gloves | | | |
| "Fleming's note, 15/, but is | | and pall | 0 | 17 | 0 |
| not to be got | | ,, Mrs. Anne Fletcher, for sack, | | | |
| "£3 5/ owing from Mr. With- | | as per bill | 1 | 4 | 0 |
| erington, not to be got | | ,, Doctor Anger, 10/; to Mrs. | | | |
| / | | Latham, per bill | 0 | 12 | 8 |
| | | ,, Mrs. Eliza Sherwin, do | 1 | 11 | 0 |
| | | ,, The parson, for preaching the | | | |
| | | funeral sermon | 0 | 10 | 6 |
| | | " Proving the will, and ex- | | | |
| | | penses | 1 | 10 | 6 |
| | ; | direction of the contract of t | | | |
| | | | 210 | 0 | 9 |
| | | Balance carried to the credit of | | | |
| | | the charity school, being so | | | |
| | | left by his will, 1st August, | | | |
| | | 1723£ | 77 | 12 | 0 |
| | 10 0 | _ | | | — |
| £87] | 12 9 | £ | 87 | 12 | 9 |
| TO | T) | | | | |

During this period, 1723, Mr Bryan Blundell built on the Hospital land 36 alms houses, the rents from which brought an annual income to the hospital. Transcribing the records, we have—"amount of charges of "building and fixing 36 alms houses, £550.

| "Given by Bryan Blundell towards the above—part of which was profits from his ship 'Providence'" "Given by Mr. John Blackburne towards the above | £500 | | |
|--|------|---|---|
| | £550 | 0 | 0 |

In a note at the foot of same we find, "the above houses are built upon "the land belonging to the school, and are rented to the parish at £45 per "annum: which rent is for the use and benefit of the school for ever, only "the west houses; the gardens are Mr. Mawdsley's ground, for which we "pay 20/ per annum."

Confirmatory evidence of these transactions will be found in the minutes of a vestry meeting held 10th December, 1723, in the parochial chapel of St. Nicholas.

The hospital funds were again used, in 1732, to build a workhouse, and we find a note in the school books, "to building the workhouse, with all "conveniences, and to Mr. Brooks, for his interest on the ground, as per "account, £800, and for which the parish is to allow £40 per annum."

The parish also still continued to rent the thirty-six alms houses previously built; but the amount paid to the Hospital for rental was at this period reduced from forty-five to thirty-six pounds per annum.

"At a vestry held 11th April, 1732," this is confirmed in the following terms:—"The proceedings and arguments made and concluded upon by "the parishioners and inhabitants of this parish, at several general meetings "lately had in the common hall of the town, for having a workhouse, "which the trustees of the charity school have undertaken to build for that purpose, and to let the same for a yearly rent of £5 for every £100 they shall lay out therein, and the two wings already built on the south side of the charity school, containing 36 houses, for £36 per annum: they being first paid out of the ensuing year's poor tax. The arrears of rent now due for these houses being now read, the same are approved of and agreed to by the vestry."

The workhouse so built continued during many years to answer very well; but the population increasing, and the house being continually enlarged to meet additional requirements, it became objectionable to the neighbourhood of Hanover Street—at that time the most fashionable part of the town—and accordingly a site was sought for a new one. In 1770, the workhouse, where we this day have it, was commenced in Brownlow Hill, and thus removed from the Blue Coat Hospital lands.

Mention has been made of "gardens" belonging to Mr. Mawdsley's children, for which the school paid 20/ per annum. This continued only

to 1733; as I find at that date, "a sum of £20" paid "to Mr Mawdsley's "children, for the piece of ground" whereon were "the west houses and "the gardens."

Two years subsequently, in 1735, Mrs. Ann Cleveland having "left "premises in Dry-bridge," now Fenwick Street, "part sold in 1787, "remainder in 1802, for £1,706 13/9;" the children, whose number, in 1726, had been increased to 60, were now wholly taken into the hospital to reside, which, until this year, appears not to have been the case. We find, accordingly, an entry then made for the first time, "to provisions of "all sorts, as per account, £166 4/1," as well also, "to sundry charges on "the building, and fixing the children with bedding and all necessaries, as "per account, £105 $10/10\frac{1}{2}$."

A Steward also at this time appears to have been appointed, for an entry is made "to paid the Steward's salary and diet for 10 months, "£12 10/."

It was found necessary, a few years later, in order to give legal discharge for legacies, &c., to have a decree in Chancery made; and, accordingly, application was made to the Court of Chancery for the County Palatine, and a decree obtained, 27th August, 1739, "at the relation of Foster "Cunliffe, Esq., John Goodwin, Esq., John Atherton, Esq., and John "Hardman, Esq.," by which the property of the hospital was invested in 50 trustees;* and it was by it enacted that the treasurer or secretary shall always be an inhabitant of Liverpool: it also generally defines the object of the institution.

In the succeeding August, Mr. Clayton's legacy of £500, left by will some 17 years before, was paid, with interest, augmenting the amount to £1,000, and the same was invested with the Corporation. The school records narrate, "Mrs. Clayton was so good to pay growing interest, to "make £1,000."

A first auditing of the accounts was made in 1741, according to the requirements of the charter, when "Jno. Entwistle and Wm. Williamson "the younger, were appointed to inspect, audit, and adjust all the pre"ceding accounts of Mr Blundell and all other officers, touching their

^{*} The number was increased to 100 by a decree made in 1803.

"receipts, payments, and actings:" the same were recorded "to be just "and true."

In the following year ten more children, making in all seventy, were received into the School; in 1744, Foster Cunliffe, dying, left the School £1000, which was also put out to interest with the Corporation, and the trustees, pursuant to the decree in chancery, granted to his heirs the nomination of five children into the Hospital. Similar grants had in like manner been made to others, on their "giving and assuring to the "use of the Hospital, lands, tenements, or money, to the value of £100 "for each child." Upon the receipt of these legacies, Bryan Blundell writes, "our stock, by good providence, increasing, and being very "desirous of seeing 100 children in the place before I died, I got a "second instrument drawn on parchment in 1744, and solicited sub-"scriptions to enable us to take in 30 more. Accordingly £2000 were "subscribed, upon which we were determined to trust the good providence "of God, which had always made up our deficiencies, and in 1748 we took "in 30 more, so that there now are 70 boys and 30 girls, in all 100, a sight "I much and earnestly desired to see before I died." He adds "The "charge is now £700 per annum, towards which we have, by the blessing "of God, attained to a stock or income of £400 a year; the other £300 "comes in by gifts and legacies, so that we have never yet wanted at the "year's end, but always continued increasing a little. I have now been "treasurer 37 years, in which time more than 400 children have been put "out apprentices, mostly to sea, in which business many of them are "masters, and some mates of ships, and several of them have become "benefactors to the School, and useful members of society."

"We take the children into the School at 8 years of age, and put them apprentice at 14; I give 40/ apprentice fee with each.

"It is so useful a Charity that I have frequently wished to see as many "Charity Schools as we have Churches in the town, which are four; and I "yet hope the good providence of God may bring it to pass in the "next generation."

It is not inappropriate to notice that about this time, especially in the years 1749-1755, commanders of ships returned from sea gave large sums to the School. In the former of these years as many as 24 masters of vessels are entered as having subscribed £50 8s.

In connection with these circumstances, we cannot help reverting to the fact that Bryan Blundell had been himself, in early life, one of Liverpool's good mariners, nor do we lose sight of the statement that he makes,—"many of them (the boys) are masters, &c.," and "have become benefactors to the School."

One more item remains for me to record; it is under date 1752, to the effect that "Bryan Blundell and his Sons having subscribed and paid a "pretty large sum of money this year to the School, do not continue on "their subscriptions on the year, but give handsome at the collections for "it in the Churches." They had given handsomely. The good Bryan Blundell during his life, from first to last, had given to the School the munificent sum of £3500, "being," as he states, "a tenth part "of what God had blessed him with."

It is interesting to notice in regard to Church collections, the general custom,—as I gather from the School records,—of persons who might be prevented from attending service, sending their pious contributions afterwards to the School. This is among the practices which in our day seem to be changed but not improved.*

In 1756 Bryan Blundell, the kind friend and generous patron of the Hospital, dies. After his death we have it recorded that "a picture of "Bryan Blundell, Esq., late Treasurer, Trustee, and Benefactor to the "School, presented by Mr. Hamlet Winstanley, with a frame given by "Madam Clayton, was ordered by the Trustees to be placed on the east "side of the Trustees' room in the said School." And there it is still to be seen, ranged along with other portraits which adorn the walls of the board-room.

Mr. Blundell's mortal remains were interred, in 1756, in St. Nicholas' Church, and he was succeeded in the treasurership by his son Richard, who continued in that office during the brief remaining period of the half-century, 1759, when there were received into the School 20 more children, making in all 120. After his death he was succeeded, in 1760, by his brother Jonathan, who continued through life a steady friend of the School as his father and brother had been before him: both sons realizing their father's hope that his children might be benefactors to the institution when he was in his grave.

^{*} Improvement comes too slow, and change too fast. - Childe Harold.

Of the little which is known of Bryan Blundell, one significant fact must not remain unrecorded here: he was himself an only child early left fatherless. This may in some measure explain that life-long zeal, that undying, inextinguishable charity, for which he was so remarkable. Whichever of the many causes by which he was surrounded may have moved him in his acts of charity and of goodness, one thing assuredly commends him to us as among the most distinguished of Liverpool's early worthies, and that is, that during a long life, well spent, with the blessing of Heaven on his labours, he showed, in an eminent degree, the power as well as the utility of individual effort, when rightly directed and properly applied. "Truly it is heaven upon earth to have a man moved with "charity, and who rests in providence."*

^{*} Lord Bacon.

ON THE EARLY CHARTERS OF ST. WERBURGH'S IN CHESTER.

By John Robson, M.D.

(READ 17TH FEBRUARY, 1859.)

I have had occasion in a former paper to observe, that in illustrating the first part of our history, the material remains were in great numbers and variety, but the documentary evidence was really nothing;—and in the next period, from the subversion of the Roman power to the Norman conquest, we have very few authenticated relics in a material form, while the documentary remains are numerous and important—at least for its last two centuries; and we have a remarkable consequence from this,—that our knowledge of what may be called the domestic condition of the first four centuries of the Christian era is pretty accurate, while we are quite in the dark as to historical events and political changes; in the later period again, we have accounts of occurrences, both civil and religious, but were it not for some illuminated MSS. of the 10th and 11th centuries, we should in fact know nothing of our forefathers' dress, dwellings or mode of living.

The known documents, however, connected with our own counties, dating before the conquest, are only two or three, and the most interesting of these is the Charter of King Edgar to the Church of St. Werburgh in Chester, which offers a fair opportunity of shewing the actual value of such instruments, and the uncertainties that are often attached to their use.

This Charter is printed in Dugdale's Monasticon as taken from a very old copy in the possession of Vernon of Shakerley, in Lancashire, in 1660. It is reprinted in Kemble's Codex Diplomaticus,* who has marked it with an asterisk, thereby questioning its authenticity, but upon what grounds, or to what extent, he does not state. Mr. Ormerod says that a

^{*} Vol. 2, p. 351.

copy is found in the Charter-book of the Abbey in the British Museum, but not in its proper place, as if the scribe cared little about it, and hence Mr. O. supposes it might be considered spurious.

It is given by "Eadgar, King of Mercia, for the redemption of his own soul and the souls of his predecessors Eadmund and Athelstan," and grants "to the humble family who are assiduously serving God in honor of the most holy Virgin Werburgh in Leiacestria, a certain portion of seventeen townships "-or perhaps more correctly seventeen farms and tenements or estates in the townships of Hodesnid and Ceosaula and Huntingdon and Hupton and Eston and Barue. They are to possess all things pertaining to these lands, through all time, by hereditary right, and have free liberty to do therewith whatever they like. The bounds of these properties are then referred to, but this constituting a different document, is unluckily not forthcoming; he further declares the gift free from any claim either of militia-muster, bridge-building or castle-building, and any one attempting to infringe this grant or the privileges is consigned to the fiery depths of Tartarus unless he make satisfaction. It is dated 958, at the well-known place called Wentric, and appears to have been followed by a series of signatures, of which, however, the King's own name only appears-I Edgar, King of the Mercians and the rest of the nations.

Kemble supposes the Charter to have belonged to Leicester; but we are as much in the dark as to his reasons for this, as for his doubting the truth of the document altogether.

There are some points about it which, to say the least, are not common; first there is the clause giving the Community—whose title is not stated—the right of disposing of the property; then there is the absolute freedom from the trinoda necessitas—the militia, bridge and castle building; and then there is the title of King of the Mercians in the body of the deed altered to King of the Mercians and the rest of the nations in the signature. But these circumstances, though uncommon, hardly seem sufficient to justify the rejection of the Charter, and as no one ever heard of St. Werburgh at Leicester, and Kemble does not attempt to identify the places named with any towns in that district, I am quite willing to accept it from Dugdale's statement and its appearance in the Abbey Charter book; and if we find that these places really belonged at the Conquest to the Church

of St. Werburgh at Chester, it will go far to shew that the document is what it professes to be.

Mr. Ormerod's objections* seem rather in favor of the document being genuine. The monks, as will be seen hereafter, did not hold their lands by this Charter; and it must have been preserved accidentally from the destruction of the rest which would be effected when they got possession; there could have been no possible object in forging it afterwards.

In Domesday Book, compiled before 1086, we have a list of the estates belonging to the Church of St. Werburgh, commencing with thirteen houses in the city of Chester, one held by the Warden, the other twelve by the Canons, free from all service.

In Dudestan Hundred.
Saltone.
Cavelea, with a boat and net.
Hunditone, with a boat and net.
Bocstone.
Pulford.

In Riseton Hundred. Etingehalle.

In Wilaveston Hundred.
Wivevrene.
Crostone.
Wisdelea.
Sudtone.
Salhare.

Sotowiche.
Nestone.
Rabie.

In Roelau Hundred.
Trosford.
Inise.

In Tunendune Hundred.
Midestune.
Clistune.

In Exestan Hundred.
Odeslei.

In Atiscros Hundred.
Wepre.
Leche.

Besides these the Domesday record informs us that the Canons claimed land in Stanei, of which they had been unjustly deprived, † also of a hide at Burwardeslei.

That the four last-named places in Edgar's Charter belonged to the Church at the time of the conquest there can be no doubt. The two first are unknown, and have been probably blundered by the scribe; and though easy enough to pick out of the other names some resembling them, it is not worth while to make the attempt. It is said that Leofric, Earl of Coventry and Chester, in 1057, made large gifts to St. Werburgh, and, any way, the estates had increased from the six of Edgar's, to twenty in 1086. Seven years after this we are told Hugh d'Avranches, surnamed

^{*} It is interpolated in a blank leaf, not referred to in the Index, and in a different hand to the rest of the MS.

⁺ D. B. 264 a. + 264 b.

the Wolf, was very ill, and sent for Anselm, the Abbot of Bec, in Normandy, to whose care he entrusted the establishment of a Benedictine Monastery, instead of the Canons who then were in possession. That there must have been other Charters in existence in 1086 is clear, and that either the Earl or the Monks destroyed them when they ousted the Canons follows as a matter of course. How Edgar's escaped we have no means of knowing—but that the Monks could attach any value to it was not to be expected—it was, in fact, a protest against their own title.

In examining the account in the Domesday Book, it is noticeable that some places were worth more than in the time of the Confessor, many were of equal value, and the whole rents are only about twenty-nine shillings less than before the conquest. The number of estates or townships is twenty-one.

It was only seven years after the completion of the survey, that Hugh Lupus ejected the Canons—and replaced them with Benedictine Monks* but from whatever cause, it seems quite certain that he never gave the new comers the security of a Charter, and this want has evidently led the Monks to take various precautions, and to fence their rights in the best way that they could. These Charters generally begin with reflections upon the uncertainty of life, the vanity of earthly treasures, and the danger of riches; and the Monks were always quite ready to accept any quantity of these earthly superfluities, with all the responsibilities attached thereto. They generally ended with fierce denunciations against all who injured or robbed, or interfered with the rights and property of the grantees; and, as the Earl, before making a legal grant, or rather by that very act assumed the property in question, he might feel some scruples in incurring the curses so liberally showered upon wrong doers; while the Monks could not but have been quite aware that they had no claim to the estates of the Canons, and that they would incur all the dangers invoked in the previous Charters. All this they might well get over, but conscience

^{*} The actual difference between these two bodies seems at the present day small enough, but perhaps on that very account their mutual hatred was more intense. The Canons were Priests, generally connected with a Cathedral or Mother Church, who lived together under a certain Canon or Rule, and seem to have been of many sorts. The Monks were men who had taken certain vows, and lived under a specific Regula or Rule, and hence were called Regulars; they were not necessarily Priests, and they were in greater variety than their rivals; the Monks held their property in common, the Canons had each his independent prebend.

must have been more alarmed with the danger that somebody, with the power and inclination, might at some future time serve them as they had served their predecessors;* and we may now examine the steps which they took to secure—what I fear must be considered—their ill-gotten estates.

When the Archæological Association met in Chester in 1849, a very remarkable Charter was exhibited, belonging to the Marquis of Westminster. There is a long account of it by Mr. Planché, and a transcript in the Journal of the Association, + which however is unintelligible, but we have a full translation of it in the Journal of the Chester Archæological Society, with a very interesting description of the document itself, from the pen of the late Rev. Mr. Massie. It was supposed and asserted that it contained the original Charter of the foundation of St. Werburgh, from Hugh Lupus, but this is clearly a mistake. It was no doubt one of the most important that the Monks had to shew, but it is merely a record that such and such lands had been given, not a legal Charter conveying the property. printed with important variations however, from a copy then in the possession of the Bishop, by Dugdale, in the Monasticon—and this copy was examined by Badelesmere, Justiciary of Chester, in the reign of Edward I., and is given in the Charter Book of the Abbey. frequently quoted, Mr. Massie tells us, under the title of "Sanctorum prisea," the two first words, as was common at the time. It commences (I quote Mr. Massie's translation,) by stating the necessity,—"That "those things which have been done by our contemporaries in exaltation "of Holy Mother Church, should be made manifest to the present "generation through ourselves, and should be preserved for the "recognition of posterity by our writing. Let us now therefore, imitating "the example of our ancestors, relate certain works of piety which have "been done in England by Hugh, Count of Chester, in the year from the "incarnation of our Lord, 1093, the most potent King William reigning, "Anselm being chief Pontiff in the Archbishopric of Canterbury, and "Thomas being Archbishop of York."

If we now turn to the early Norman Chroniclers for their account of the matter, William of Malmesbury tells us that St. Werburgh was buried in

^{*} It seems that Earl Richard had some such intention.

the Monastery lately built by Hugh, Earl of Chester, in that city. He had previously ejected the few priests who were living there in dirt and poverty.* He says in another place that Hugh had long been ill, and that he was desirous to fill his new monastery with monks from Bec, of which place Anselm was abbot. Another chronicler tells that Anselm in 1093 visited England; first, to get the monasteries freed from a heavy tax which the King had imposed upon them; second, to visit Hugh, the Earl, then greviously sick; and third, to found a monastery at Chester, when he placed as first abbot, his chaplain, Richard, and changed the Secular Canons into Regulars: on his return he was made Archbishop of Canterbury. There are other authorities to the same purport in the Monasticon.

It is clear, therefore, that this document was drawn up after the revolution, if I may so call it, and when Anselm had been made Archbishop. proceeds to say, that the Earl and his Countess had placed in the Church of St. Werburgh monks to pray for the souls of the King, his mother, Queen Matilda, &c., and "granted the former possessions free and quit "forever, and augmented them out of their own property, and rendered it "convenient for the habitation of monks, and made that Abbey subordinate "to no Abbey whatever." Then follows the list of places which they also gave, but which is merely a recital of the places already described in Domesday, as belonging to the Church. They gave of their own domain a Vicus, in the city, extending from North Gate to this Church; the site of a Mill at the City Bridge, and some other lands in Ross, Wirral, and Lendesia. Weston in Derbyshire, which after the dissolution was assigned as the residence of the new Bishop, appears to have been the special gift of the Countess. † In addition, they granted various tithes in different townships, and advowsons of Church livings. part of the Charter concludes thus, "Moreover, they allowed to their "Barons that every one of them should give after his death, a fair part of "all his substance to the foresaid Abbey, and a hundred solidatas (oxgangs "12 acres?) of land; but others according to their means." t Witnesses, the Reverend Lord Anselm, Archbishop; Hervy, (Bishop of Bangor,) &c.

^{*} Ejectis inde pauculis clericis qui ibidem fædo et paupere victu vitam transigebant. Dugd. Monast. Vol. 1, p. 200.

⁺ It was, by command of the Count Hugh, laid upon the high altar by her, in the presence of Lord Anselm, Archbishop of Canterbury, and his Barons.

[†] Moreover, they conceded to their chief Barons that each should give the said

The recommendation to the Barons was not without its effect; we have a long list of grants of lands, churches, tithes &c., each confirmed by its own witnesses; and then comes "the testimony of Archbishop Anselm," which lets us into the method of transferring, or annexing, ecclesiastical property in the eleventh century.

"It behoves every Christian to bear testimony to those things which he has himself, being present, heard to be devoted for all futurity to the honour of God, lest any one at any time less loving God should be able to change them on any pretext in time to come by perversion. Wherefore, I, "Anselm, by the grace of God, add the testimony of the Archbishopric of the Holy Church of Canterbury, that when Hugh, Earl of Chester, placed Monks in the Church of St. Werburgh, he granted, &c.," (freedom from tolls and extra jurisdiction.) "But as regards the prebends of the Canons, he decreed by their concession, myself and Robert the Bishop, and their Barons being witnesses, that after the death of any of them, their prebends should pass free without any contradiction into the proprietorship of the Monks for their use; but if any one should offer to infringe any of these, "he should be anathema, and eternally damned with Judas the betrayer of our Lord, and be tortured with Simon Magus and the demons in hell."

We have then a list of the grants of Earl Richard, the son of Hugh Lupus, and others, and finally a regular confirmation of all these gifts by the second Randal, Earl of Chester—with additions from himself in regular legal form—constituting a formal deed. An additional curse of a later Archbishop, on all attempting to disturb the confirmation of Anselm, in a different hand writing, concludes the document, which is of the age of King Stephen, and no doubt contemporary with the younger Randal and the genuine Charter which he gave.

In judging of the genuineness of ancient Charters, the most important evidence is to be sought in the signatures attached, and here we find some curious discrepancies. Anselm signs as Archbishop, which he confessedly was not at the period when he was in Chester and established the Monastery.

Abbey one hundred solidata of land, but others according to their pleasure and ability. They further ordained that each Baron and Knight (miles) should give to God and St. Werburgh at his death, his body and a third part of his substance—and this order was made not merely as concerning his Barons and Knights, but also his Burgesses and other Freemen.—Monasticon, 1, 201,

In his testimony he speaks of Robert the Bishop being there, and this might well be, as the Bishop of Lichfield (including Chester,) had that name—but among the witnesses to the deed is Hervy, Bishop—and he was Bishop of Bangor some years after. In the document given by Dugdale, we have Richard, son of Earl Hugh, joining in the grant, though he was not born till 1095. In fact, this has evidently been drawn up at a later period, and with reference to especial points, which the Charter of the younger Randal did not seem to be sufficiently explicit upon.*

In the Appendix to the Monasticon we have Charters from Richard dated 1119—from the first Randal, and several from his successor, but none agreeing with the newly recovered one—and having, when compared with this, very much the appearance of being fictitious. It must be remembered that they merely profess to be copies—but they exhibit a sort of forgery upon an extensive scale. There may indeed be good reason for believing that the different properties had been either given or promised to the Monks, and they were naturally anxious to establish the strongest legal barriers in defence of their lands that the case allowed. The gifts were bonâ fide, but the proofs were wanting—and besides these deeds, whether

^{*} Some of these various readings are worth notice. In Mr. Massie's translation (the Latin copy in the Journal being quite unintelligible,) we have—"The gift of Weston, "Ermentrude, the Countess, by command of Count Hugh, laid upon the high altar in "presence of Lord Anselm, archbishop of Canterbury and his Barons. On that day they "put St. Werburgh in possession of Weston by the tenth of the same Weston, and by the "church and glebe of the church of Eston, (Aston?) and by land of one carruca (one "cart of land?) which they then exhibited on the spot." This form—if form it were—of depositing a cart load of soil at the high altar is sufficiently curious, but the Monasticon has somewhat different language—" and in Lendsia land of ten oxen, after the death of "the Earl and Countess, Weston with its appurtenances in Derbyshire, and for the present, "the tithe of the Manor and the Church of Eston, and land of two oxgangs" (duarum carucarum). In the translation, as the last gift we find "At the festival of St. Werburgh "in summer, he allowed feiriam (a fair) in those days,"—but in the Monasticon it is much more explicit. Moreover, the Earl Hugh, at the feast of St. Werburgh in summer, gave the toll and all the rents and revenues of three days' market, (nundinarum trium dierum,) ordaining that all offences committed in the fair, and all pleas should be tried in the Court of St. Werburgh for the benefit of the monks. He moreover granted in honour of the Virgin that any thief or other malefactor coming to the fair should not in any way be molested, except for some offence committed in it. After this we read-"These, therefore, are the gifts given to the Abbey of St. Werburgh, all which I, Earl "Hugh, and Richard my son, and Ermentrude the Countess, &c., and to which Anselm "the Archbishop, puts not only his own seal, but the seal of God omnipotent." Another difference has been already pointed out about the Barons or Tenants.

real or pretended, miracles were in abundance, to shew the danger of meddling with the possessions of St. Werburgh. One of these occurred at Upton—which is about a mile and a half from Chester, and which, though named in Edgar's Charter, is omitted altogether in Domesday. It is with many others related in Henry Bradshaw's Life of St. Werburgh.

Twice already had hostile armies advanced to the walls of Chester, and twice had they been shamefully discomfited, when the shrine of the Virgin Saint was outraged—but "The thyrde season approached to Chester cite, "Many cruell ennemyes in the part of Wirrall." While the citizens were preparing to defend the city—having "sum artillarie," the country people brought their corn and cattle "In assurance to be, to the parke of Upton, "Saint Werburgh's lands, from all distruction, Whiche parke from Upton was "distaunt a myle space, A prebende to a Chanon of her mynistre and place."* The enemy "against all conscience and order of charity" entered the park with "myche cruelty," pulled down the "paale," and put in their horses "of a hie presumpcion."

- "Werburge remembrynge theyr great wyckedness,
- "Theyr malice and myschief against her possessions,
- "By miracle showed her power and goodness,
- "Preserving her servants from all vexation,
- "And punyshing her ennemies with great affliction,
- "As she hath done many seasons or this."
- "When the corn shevys lay broken upon the playne,
- "The horses had no power any part to take,
- "For why? theyr heads all in certayne,
- "Were upholden in the ayre."

So that while they were utterly unable to eat or injure anything, their masters "raged out of mynde," were smitten with palsy, leprosy and blindness; and when this was made known to the rulers and captains, they caused the sheaves to be again tied up, and prayed this holy Virgin to save them, promising to come no more there. "From that time forth "there dares no nation—Considering the power of this Virgin pure, "Approching Chester cite, to make derogacion, Denmarke, Goet, nor "Galway Scot ye may be sure—Cruell Danes nor Walshmen."

We have copied the not very complimentary account of the Canons given by William of Malmesbury. Bradshaw is more candid, or at

^{*} It may be remarked that most of these miracles happened in the days of the old Canons.

any rate more laudatory—and after telling of the great increase in honour, possessions, freedom and riches, in the time of Earl Leofric, he says the place also increased in devotion.—"The Chanons observed vertue "and clennes, Daily augmenting by divine sufference Unto the comyng to "this lande of Normans."

Very soon after the translation, however, we have a tale how "A Monke "there dwelled of vertuous disposicion, Under obedience nominate Dan "Simon." He is represented "his tyme well usyng, Nowe in vertuous "study, nowe in contemplacion, Nowe in devoute prayer, nowe busily "wryttinge, Sometyme in solace and honest recreacion, Observed devoutly "his holy religion, Obedience, pacience, and wilfule povertye, Mekeness, "meditacion, with pure chastity." But this model Monk was no favourite among his "brethren repleit with envy. They layed to his charge open "wronges and injury, They punished and oppressed hym with great "affliction, Daily augmenting by subtle collusion." Dan Simon, finding all his efforts to conciliate useless, determined to depart to some other place, when Werburgh appeared to him in a vision, "brighter than Phebus "in his meridian spere," and asked why he was so sad? in his reply he tells her "Divers of my bretherne ben greved at me, Vexing me dayly "with great tribulation, Causeles on my part deserved trule, in word or in "dede gyvyng none occasion, I can not be quiet among that congregacion." The Saint, however, encourages him. "Thy sufferance shall be great joy "and pleasure, And for thy pacience thou maist be sure To have reward in "blis perpetual, At thy departure from this life mortall." She vanished, "The Monke was meke in hert and mery," observed her doctrine, and "at his departure, For his pacience, passed to eternall pleasure."

How Earl Hugh got his surname of Wolf, I have not ascertained, but he seems to have richly deserved it; in a cruel age he was noted for his cruelty and blood-thirstiness, and his barbarities in Anglesea, which he, with a contemporary Earl of Shrewsbury, overran—are thought worthy of record by the chroniclers. He ate and drank to excess, and was styled by the Welsh, Hugh the Fat. He had many illegitimate children, and was equally regardless how he got or how he squandered money. His suzerain, William the Red, appears to have been such another character, and in the same year, (1093,) both fell dangerously ill. Earl Hugh established the Monastery of St. Werburgh, and the King—very probably under the same

management, and influence of Anselm, that at Gloucester. Anselm was appointed Archbishop of Canterbury, the see having been then vacant, and the revenues going into the King's coffers for three years. Earl Hugh died a Monk in his abbey, having taken the cowl a few days before his death.

If charity consisted in endowing abbeys, we may easily understand how it might cover many sins, and the Monks of St. Werburgh had certainly nothing ill to say of their founder. Dan Bradshaw in his Life of the Saint has a very flattering picture of him, which may be compared with Ordericus Vitalis.*

The contrast of the Canons with the Monks, is not to the advantage of the latter. † The utter uselessness of miracles in changing evil inclinations, could hardly be better shown than in the history of Earl Hugh's successor, Earl Richard. † He had gone in pilgrimage to Holywell "For "his great merite and gostly advantage." The wicked Welshmen were quite ready to take advantage of the situation, and "raised a cruell com-"pany betwixt hym and Chester." The Earl, however, found means to send word to his Constable, William Fitz Nigel, and he assembled "a mighty strong host in theyr best arraye Toward Hilburghee, on journey "ridyng fast"-expecting to find shipping to transport them across. "Wyllyam, the constable," in despair found no ships there, but he, as recommended by "a Monk there dwelling contemplatyve" prayed to St. Werburgh. His prayers were answered, and the dry sands appeared "in syghte of them each one." He crossed over, rescued the Earl, "Brought hym in safe garde agayne to Chester cite:" and returning his thanks to Saint Werburgh, gave her the village of Newton, and founded the Abbey of Norton.

^{*} Forester's Translation, Bohn Antiq. Lib., vol. 2, p. 147, and Life of St. Werburgh, p. 181. He was, according to the poet, "a noble worthy prynce, Flowrying in chivalry, "bold and victorious, Manfull in batell, liberal and vertuous." It would seem that Cheshire held out against the Conqueror, and he gave it to Hugh to win and hold by the sword; he had no easy conquest, for it was not till after three defeats that he got possession of the county, and the slaughter and devastation, as is plain from Domesday book, must have been all but universal, at least as far as the owners of the land were concerned. Besides the more substantial endowments, he gave "royal riche ornaments, Copes, crosses, jewels of great royalty, Chalices, censors, vestures," a library of books to read and sing, and of these "some remayne Within the sayed Monastery to this day "certayne."

⁺ Life of St. Werburgh, pp. 180 - 185. ‡ Ibid, p. 187.

"And where the host passed over betwixt bondes, "To this day ben called the constable sondes."

Earl Richard did not participate in the grateful feelings of his Constable. He "Entended to alter and change the foundacion of the sayd abbaye "to another religion, Confirmed the same, sweryng most depely At his "whom comyng to England from Normandy."

Werburgh however, who with more female levity than becomes a Saint, seems to have transferred her affections from the old Canons to the Monks, was taking effectual means to free her new protegés from their danger.

- "On saynt Katharins day at after mydnyght
- "When matens where ended, and bretherne gon,
- "Some mournynge waylyng for drede full ryght,
- "Some busie in prayer and contemplacion,
- "Werburge appeared to the secristan alone
- "Sayenge: ye may be joyfull in god and mery
- "Erle Richarde is drowned your mortall ennemy.

The story of the shipwreck of Prince Henry and many of the nobility on St. Catherine's day, (Nov. 27th,) 1120 is well known.

I should be inclined to believe that the document included in Earl Randall's Charter was the first edition—and as, after all, it was a mere record, was corrected and improved in the second, which obtained the legal sanction of the Justiciary—but till more of the original Charters turn up, much doubt will necessarily rest upon the copies which we now possess of the grants of Earls Richard and Randall, the first and second. But even if it were not a hopeless, it would be not a very profitable task to enter into the investigation.

ON THE GREAT COMET OF 1858.

By John Hartnup, F.R.A.S., and J. T. Towson, F.R.G.S.

(READ 20th JANUARY, 1859.)

During the latter part of September and the two first weeks in October of last year, (1858,) a visiter of no ordinary appearance attracted great attention from the inhabitants of this hemisphere. Generally the observations of comets, taken by astronomers for the purpose of ascertaining their positions in the heavens, and used for determining the elements of their orbits, possess so little public interest that they are communicated to those societies and publications only, which are devoted exclusively to the promotion of practical astronomy. A large majority of the comets seen by astronomers are not visible to the naked eye, and their positions are often given with no further remark by the observer as to their appearance in the telescope, than such as—that the nebulosity appeared either round or elongated, more or less condensed towards the centre, and of a certain number of seconds diameter. The great comet of 1858, however, differed widely in appearance from these telescopic comets. The majestic sweep of the train, which was not projected in a straight line from the head, but in a curve of stupendous proportion, and the star-like appearance of the nucleus, could not have escaped the notice of the most casual observer. It has, therefore, been thought that the observed position of this comet, taken with the equatorial of the Liverpool Observatory, together with the physical observations undertaken by Mr. Towson, may not be deemed unworthy of a place in the transactions of the Historic Society.

The instrument with which the positions of the comet were taken, and through which it was seen as represented in the telescopic drawings of Mr. Towson, is an achromatic refractor, of twelve feet, focal length, and eight and-a-half inches' aperture. The hour circle and declination circle are each four feet in diameter, divided on silver; and each circle is read with two micrometer microscopes. The weight of the polar axis is upwards of four

tons, and this is turned in right ascension by a water-clock, at the same rate that the earth moves upon its axis, thereby keeping in the field of view any heavenly body that the observer wishes to scrutinize.

The observations for determining the positions of the comet were for the most part taken before the close of daylight, at which time the tail and coma not being visible, the nucleus was well defined and suitable for accurate observations. In table I, column 1 shows the day of the month on which the observations were taken; column 2, the Greenwich mean time to the nearest tenth of a second; column 3, the right ascension; column 4, the north polar distance of the comet; and column 5 shows the name or number of the star with which the comet was compared on each night that observations were taken.

TABLE I.

| 1858. | GREENWICH MEAN TIME. 2 | COMET'S RIGHT ASCENSION. 3 | COMET'S NORTH POLAR DISTANCE. 4 | STAR OF COMPARISON. 5 | |
|---|--|--|---|--|--|
| | H. M. S. 7 18 29.8 7 33 30.0 7 48 30.1 7 26 36.5 7 46 37.9 8 6 39.3 | | | | |
| Sept. 27th Sept. 30th '' '' Oct. 4th Oct. 8th Oct. 13th Oct. 15th | 7 2 26.2 6 52 48.4 6 9 35.2 6 24 39.9 6 39 44.2 5 52 49.7 6 12 58.4 6 33 4.6 6 15 7.2 6 55 24.4 6 30 53.8 6 46 0.2 5 59 52.1 | 12 22 32.67 12 39 47,00 13 9 19.56 13 9 26.37 13 9 32.76 13 55 19.66 13 55 30.00 13 55 40.02 14 45 26.65 14 55 48.15 15 44 54.51 15 45 1.54 16 5 41.35 | 55 18 28.1 56 42 9.9 60 1 10.3 60 2 3.4 60 2 58.4 67 38 8.2 67 40 13.0 67 42 14.3 79 25 5.6 79 30 40.8 96 54 3.5 96 56 12.0 103 15 53.5 | 12 Can. Ven. B. A. c. 4390 ", ", Arcturus. B. A. c. 4853 ", 5306 B. A. c. 5720 | |

The observations are corrected for refraction and parallax in time and arc. The parallax is computed on the hypothesis that the distances from the sun are those stated in Table III; that the earth's mean distance from the sun is 95,363,000 miles, its mean hourly motion 68,348 miles, and that the sun's mean equatorial horizontal parallax is 8",58. Table II gives the assumed mean places of the stars of comparison for 1858, January o.

TABLE II.

| | RIGHT ASCENSION. | NORTH POLAR DISTANCE. | AUTHORITY. | | |
|----------------------|------------------|--------------------------|--------------------------------|--|--|
| | н. м. s. | 0 1 11 | | | |
| в. а. с. 3811 | 11 1 30.37 | 52 55 14.00 | British Association Catalogue. | | |
| ,, 3965 | 11 33 33.92 | 54 59 51.26 | " " | | |
| ,, 3998 | 11 42 18.63 | 54 16 45.57 | " | | |
| ,, 4128 | 12 9 21.81 | 56 8 44.56 | 22 22 | | |
| ,, 4233 | 12 26 37.93 | 55 58 4.20 | 22 22 | | |
| 12 Canum Venaticorum | 12 49 22.68 | 50 54 50.04 | Nautical Almanac, 1858. | | |
| в. а. с. 4390 | 13 0 21.84 | 61 36 44.55 | British Association Catalogue. | | |
| Arcturus. | 14 9 11.09 | 70 4 35.57 | Nautical Almanac, 1858. | | |
| в. а. с. 4853 | 14 34 54.62 | 77 43 27.64 | British Association Catalogue. | | |
| ,, 5306 | 15 53 8.17 | 98 0 20.49 | ,, ,, ,, | | |
| ,, 5720 | 16 53 9.76 | 103 20 22.78 | ,, ,, | | |
| | | | | | |

Table III contains the distances of the comet from the earth and from the sun, and its hourly rate of motion as calculated from the foregoing data.

TABLE III.

| G. M. Noon, 1858. | PISTANCE OF COMET FROM EARTH. | DISTANCE OF COMET FROM SUN. | Hourly Velocity in Miles. | |
|----------------------|---|--|---|--|
| Sept. 12th | 126,260,000 115,900,000 104,800,000 94,700,000 86,300,000 77,000,000 66,300,000 58,100,000 52,400,000 52,200,000 54,900,000 | 67,000,000 61,900,000 57,100,000 52,700,000 49,600,000 48,600,000 46,900,000 45,100,000 48,000,000 51,600,000 58,300,000 61,900,000 | 94,000 102,300 111,000 120,200 127,700 130,200 134,800 140,400 131,900 122,600 108,600 102,300 | |

From the same data we deduce the elements of the comet's orbit previously to its perihelion passage, as contained in Table IV.

| TABLE IV. | н. м. s. |
|---|----------------|
| Greenwich mean civil time of Perihelion passage, 1858, Sept. 30 | 10 52 0,5 a.m. |
| | © 1 W |
| Longitude of Ascending Node | 165 19 10,1 |
| Longitude of Perihelion | 36 15 2,3 |
| Inclination of Orbit to plane of Ecliptic | 63 2 15,5 |
| Axis Major of Orbit in Miles | 30,896,000,000 |
| Axis Minor of Orbit in Miles | 2,383,740,000 |
| Aphelion Distance in Miles | 30,851,000,000 |
| Perihelion Distance in Miles | 45,070,000 |
| Hourly Motion at Perihelion, in Miles | 140,070 |
| Hourly Motion at Aphelion, in Miles | 410 |
| Period of Revolution | 2,058½ years. |
| | |

Motion Retrograde.

The comet of 1858 was first discovered by Dr. Donati, astronomer at the Museum of Florence, on the 2nd of June; its right ascension being then 141° 18', and its declination 23° 47' North. This part of the heavens is in the constellation Leo, near the star λ Leonis. The comet had passed its ascending node on the 27th of March. For more than two thousand years it had occupied portions of the heavens below, or South of the plane of the earth's orbit: on the day last named it passed over to the Northern heavens, but only to remain for the brief period of 205 days, descending again into the southern hemisphere on the 18th of October, there to remain for more than two thousand years. At the period of its first discovery it was 228,000,000 of miles distant from the earth, and was a very faint object when viewed even by means of the largest telescopes. It was not until the middle of August that it attracted more than ordinary attention, even from astronomers. About this period its track had been approximately determined, and it was then believed that during the latter part of September and the beginning of October it would become an object of extraordinary interest, not to the astronomer only, but generally to the inhabitants of the northern hemisphere. Nor were these anticipations disappointed. Since 1811 no comet has excited equal interest, nor has there existed so magnificent an object of admiration. In former days it would have been regarded with superstitious dread; but the more correct knowledge now possessed by no

means decreases the interest excited by the contemplation of these mysterious bodies. No longer regarded as the "flaming scimitar" hanging over a doomed city, it has now become associated with the planets of the solar Thus, although divested of the interest with which superstition had surrounded it, a rational admiration is excited in contemplating the immensity of its dimensions and the vast duration of the period of its revolution round the sun. Until the end of the seventeenth century comets were supposed to be meteoric bodies. The Chaldeans, it is true, placed them amongst the members of the Planetary System, and Seneca supported the same hypothesis; but with the exception of these happy advances on the philosophy of the early ages, the boldest conjecture placed comets at a far less distance from the earth than the moon. Tycho Brahé made the first step in establishing the planetary nature of comets, by observing their parallax to be less than that of the moon, and thus proving them to be at a greater distance from us than our satellite.* afterwards drew the analogy between planets and comets still closer, by proving that they both revolved about the sun in a curve, agreeing with some one of the conic sections, and therefore that comets in their eccentric orbits are governed by the same laws that regulate the movements of the more substantial members of the solar system, thus supporting the hypothesis of universal gravitation.

Then came the computations of Halley and Encke on the two comets which bear their names, the former having a period of 75 years, while the latter returns to us after an interval of only 1210 days. We have also the comets of Biela, Faye, De Vico and Brorsen, the periods of which are well known, and the returns of which have proved the accuracy of the calculations. At the present period the approximate elements of the orbits of all comets, of which three good observations are made, are calculated, although with the exception of those already named, the periods are in most cases so long as to preclude the means of verifying these predictions by actual observation. Still, however, we must not imagine that we can compute the elements of a comet, having a long period, with accuracy even approaching to that with which we can predict the movements of a planet. From 1821 to 1844, our Astronomers observed that there existed a

^{* &}quot;De Mundi Ætherei recentioribus Phenomenis liber secundus, qui est de illustri "Stella Caudata anno 1577, Conspecta 1588." And "Apologetica Responsio," &c., 1591.

difference of a little more than two minutes of space between the computed and observed positions of Uranus. This small discrepancy was sufficient to prove to Adams and Le Verrier that there existed a planet beyond Uranus, and to provide them with data for calculating the position of Neptune and the approximate elements of his orbit. But we have no expectation of accuracy like this in the computation of the return of a comet of a long period, and in proportion as the time of its revolution round the sun becomes extended, so does this uncertainty increase. with a comet, the period of which is about two thousand years, we cannot expect to be within one hundred years of the truth. A discrepancy of one hundred years in the return of Donati's comet as compared with its computed period would give rise to no surmises amongst Astronomers; but a difference of two or three minutes of arc in the position of Uranus, though it suggested to the minds of some Astronomers that the laws of gravitation themselves underwent a modification in remote regions of the Solar System, provided to the more profound philosophers the means of attaining the crowning glory of inductive science.

There are two reasons to be assigned for this marked difference in the accuracy with which the elements of a planet and those of a comet, having a long period, can be calculated. The first is, that on account of the great eccentricity of a comet's orbit, we can only observe its motion near the perihelion—the position most unfavourable for determining the elements of an orbit which is very eccentric.

And secondly, the greater the eccentricity of an orbit, the more liable it is to be disturbed by perturbation. The perihelion of a comet's orbit is not only an unfavourable position for determining its elements, on account of the short period during which it is under observation, but the form of the curve and the rate of motion of comets moving in orbits of various degrees of eccentricity, so nearly resemble those of the path of a comet whose period is infinite, that we have only to do with minutes, or even seconds of arc, to distinguish whether the period of a comet's revolution is either two or three thousand years. Taking it for granted that the period of Donati's comet is a little more than two thousand years, then for a term of two thousand years whilst the position of that body is far beyond the scan of human eye, the elements differ widely from that of a comet of a longer period, but for the eight months during which it may be

observed from this earth, if the perihelion distances be equal, the position will only vary a few minutes, whether the time of its revolution be a thousand years or infinite.

When a comet is first observed it is usual to predict the position, from day to day, founded on the hypothesis that it is moving in a parabolic orbit. This is afterwards termed its assumed position, and it is the difference between the assumed place in the heavens and its observed position which affords the means of calculating its approximate period and the eccentricity of its orbit. If this difference were several degrees, as in the case of any two planets, the elements of its orbit could be computed with great exactness, but since with comets it often consists of only minutes, or sometimes seconds of arc, it requires all the accuracy which the most improved instruments and the most experienced observers can afford, to provide data sufficiently correct to determine the period within one hundred years of the truth.* We believe that the hourly motion of Donati's comet, when passing the perihelion, was about 140,500 miles. If our estimate of its distance from the sun at that period be correct, an hourly motion of 140,608 miles would have given to it a parabolic orbit never again to return to this system. The only method we have of determining the hourly motion of a heavenly body, is by observing its change of position in the heavens. Now a comet moving in a very eccentric orbit when

^{*} In a popular manner we may describe the basis on which the eccentricity of the orbit is determined in three forms. First-The mean velocity of a planet revolving round the sun is in the inverse ratio of the square root of its mean distance. If, for instance, a comet or planet were only one fourth the mean distance of the earth from the sun, its hourly motion would be twice as great as that of the earth, viz:—136,696 miles, if moving in a circular orbit. But if the hourly motion of such body were greater than the last-named velocity in the ratio of the square root of two to one, that is, if it were 193,288 miles per hour, the motion of that body would be in the curve of a parabola, and its period infinite. If the hourly motion were intermediate, between 136,696 and 193,288 miles, its orbit would be an ellipse, and its eccentricity would be great in proportion as its hourly motion approached that of 193,288 miles; if greater than the lastnamed velocity the orbit will be hyperbolical. Again, the line at right angles to the axis of the orbit passing through the focus, is called the "latus rectum." If the "semi-latus-rectum" be exactly twice the perihelion distance, the comet moves in a parabola; if greater, in a hyperbola; if less than twice, but if greater than the perihelion distance, the orbit will be an ellipsis. We may also determine the form of a comet's orbit by the angle at which it passes the "latus rectum." If it crosses it at 90° the orbit is a circle; if between 90° and 45° an ellipsis; if at 45° a parabola; and if less than 45° a hyperbola.

leaving its perihelion, falls a few minutes, or seconds, behind its assumed position, but soon recovers this place in the heavens, and in the case of Donati's comet, in about one hundred days it was a few minutes in advance if viewed from the sun, and less so if viewed from the earth. After this period its line of motion is so nearly direct from the earth, that the difference between its assumed place and its real position cannot be determined with sufficient accuracy to be of any value in calculating the elements of its orbit. Thus, its position whilst under observation would, to an observer situated on this earth, only vary a few minutes of arc, whether its period were two or three thousand years. Nor does the difficulty cease when the elements are once determined. The motions of a comet are so disturbed by the attraction of the planets near which it passes, at, or near, its ascending and descending node, that the elements of its orbit, calculated previously to either of these epochs, cease to be such afterwards. Curve, velocity and period, perihelion and aphelion distances are all changed in a few days. Thus previously to 1770, the comet of Lexel had never been observed. It had probably a period of thousands of years, anterior to the perturbing influence of Jupiter during the year 1767. It was found by theory, that in that year its near approach to Jupiter had bent its orbit from one of a long period, to that of five years and a half. In 1779, this comet again approached the same planet; his perturbation was then of a contrary nature, drawing the orbit out either into the form of an ellipsis very eccentric, in which case the period of its revolution would be of very long duration, or probably into a parabola or hyperbola; in either of these cases it would be lost for ever to this Solar System.

We have before stated that, when the orbit of a comet is to a great extent influenced by the attraction of any other heavenly body, all the elements of its orbit are disturbed. It may then appear strange that the comet of Lexel should have been twice affected by the attraction of the planet Jupiter. But if we investigate the theory of perturbation, we find this important law to obtain:—That however the former elements of the comet may be disturbed, although no other region of space through which it had passed will be approached within millions of miles, the comet in its new orbit will pass very near to that part of the heavens at which the last perturbation occurred, so that the circumstance of its having once been perturbed by Jupiter does not in the least degree render it im-

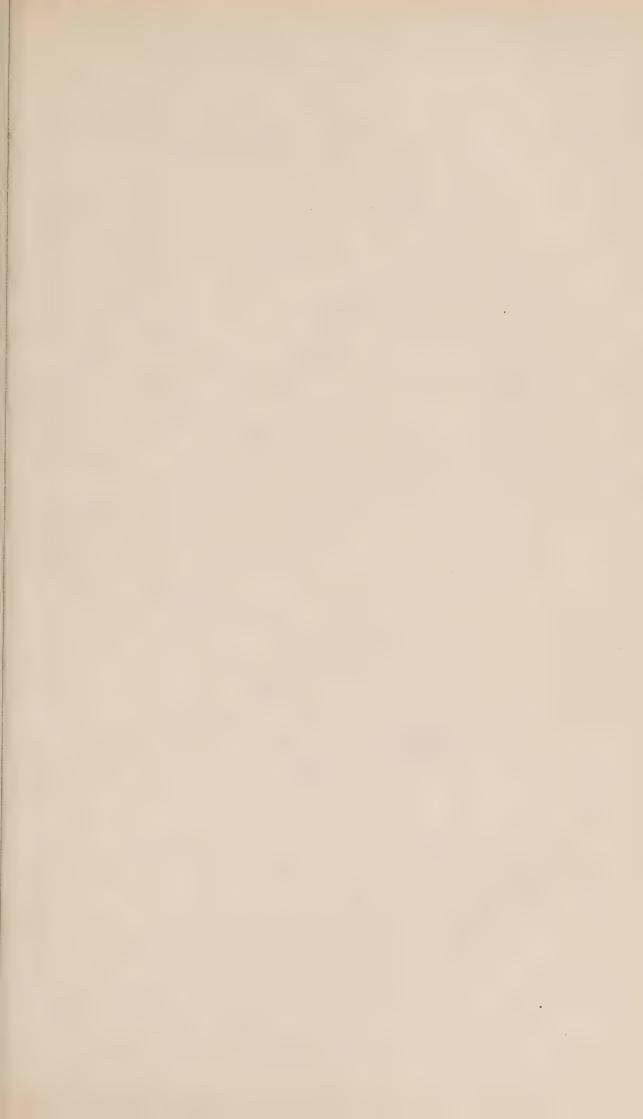
probable that the elements of its orbit will again be disturbed by the same planet. It is true, however, that if a comet be subject afterwards to a second perturbation, it is improbable that it can ever come a second time within the influence of the first perturbing body.

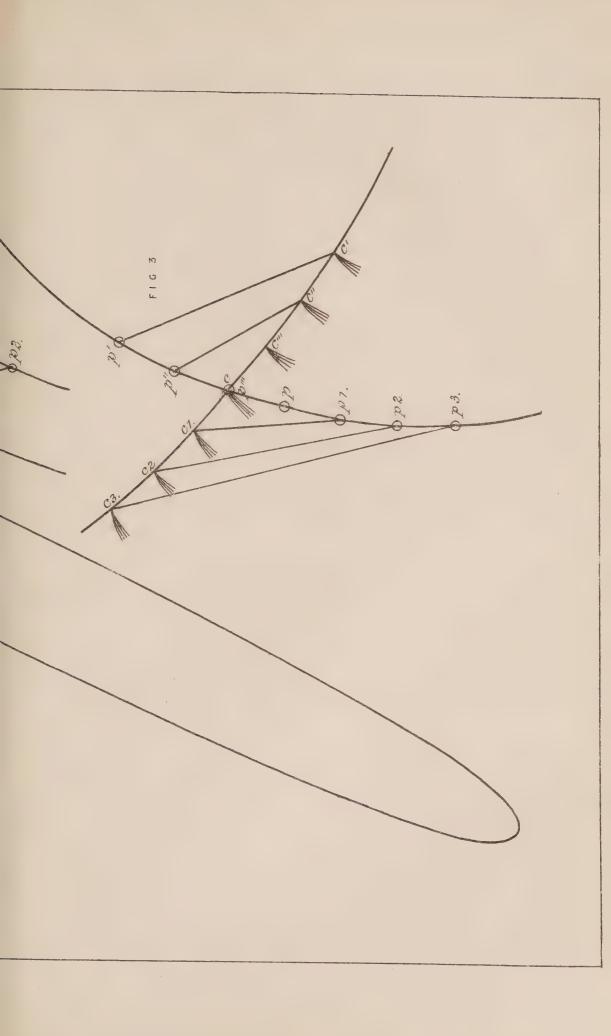
The comet of Donati, in its ascending node, passed the plane near which the planets move on the 27th of March, upwards of one hundred millions of miles from the orbit of Mars, and two hundred millions of miles from that of Jupiter. If, therefore, the comet and Jupiter had been in conjunction at that time, the perturbing influence, which is in the inverse proportion to the squares of the distance, would have been less than the four hundredth part of that which affected the comet of Lexel in 1779. But, since their right ascensions differed more than 40° at that time, they were 360 millions of miles distant, and the perturbing influence of Jupiter was only the one thousand six hundredth part of that which affected the comet of Lexel, whilst the attraction of Mars was still less. But in passing the plane of the planet's revolution round the sun, at the descending node, Donati's comet passed directly through the orbit of Venus. This occurred on the morning of the 18th of October last. Had the comet reached this part of its orbit a few days earlier, a collision would have taken place. Whether such an event would have been attended with danger to Venus we are not prepared to say. Some have asserted that a comet striking a planet would inflict no more injury than a cloud does when it comes in contact with the mountain top. Such may be the case with reference to most comets; but some, and Donati's amongst others, appear to have a nucleus of such a character as to forbid our being assured that no danger to a planet would occur by such a comet falling into it. Although no collision occurred, the comet came sufficiently near to Venus to be affected by her perturbing influence; in fact, it was within nine millions of miles, that is, as near that planet as the comet of Lexel was near to Jupiter in 1779. Had Donati's comet approached within four times that distance of Jupiter, it would have passed away in a hyperbola never again to return. But the perturbing power of Jupiter is twenty one thousand times as great as that of Venus, supposing that both are within about nine millions of miles' distance, and the attraction in both cases acts during an equal period of time. But we find this last hypothesis is far from being correct. The greater the distance a

planet or comet is from the sun, the more slowly they both move. Thus the comet of Lexel was only moving with one seventh of the velocity of Donati's, during the time the perturbing influence was in operation, and Jupiter moves with only about one third of the velocity of Venus; from which two causes combined, the respective perturbing effects of Jupiter and Venus are to each other as eighty four thousand is to one.*

It is not then surprising that comets should, by perturbation, be sometimes lost to our system. And this fact has given rise to a hypothesis regarding the object attained in the great machinery of the Universe by those comets which never revisit our solar system. It has been supposed that they are destined to keep up a communication between the different solar systems of which, we believe, the stellar universe is composed. let us for a moment consider this theory, and we shall be lost in the idea of the distance that divides us from the nearest of the stars. The aphelion distance of Donati's comet is in the direction of a Crucis, a star of the first magnitude, and if perturbation were to spread out the orbit of Donati's comet into a parabola, it would be lost in the direction of a Crucis. Now supposing that the annual parallax of this star is three tenths of a second, and that its mass is as great as that of our sun, it would occupy twenty thousand millions of years in reaching that body. We cannot presume to declare that such an immense period is beyond the limits of the providence of the Eternal Ruler of the material universe. But of this we are convinced, that no finite—no human being is capable of contemplating a period, so vast, that the whole term of the existence of all material objects with which he has to do, dwindles into insignificance.

^{*} This great perturbing power of Jupiter, as compared with that of Venus, arises from two causes. First, the mass of Jupiter is about 383 times that of Venus. Secondly, when Venus perturbed the orbit of Donati's comet, the sun exerted fifty five times as much centripetal force as when Jupiter changed the elements of Lexel's comet; since perturbation takes place in the proportion that the disturbing force bears to the retaining force, and the attraction of Venus was to that of the sun, as one is to seven thousand, for a time perturbations were only in proportion to that ratio; but that of Jupiter was three times the centripetal force; consequently Lexel's comet was then controlled by Jupiter, with three times the force that was exerted by the sun, and thus the elements of its orbit, during any given time, were disturbed twenty one thousand times as much as those of Donati's comet by Venus.





3)II

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The great amount of perturbation to which a comet is exposed, as compared with that by which planets are affected, is principally due to the great eccentricity of its orbit. This, however, is also increased when the motion of the comet is retrograde, as is the case with that of Donati's. All the planets move in one direction round the sun, that is in the contrary direction to the sun's apparent diurnal motion. But comets appear independent of the laws which influence the other members of the solar system, both as regards the direction in which they move, and also in their orbits being sometimes oblique to the plane of the ecliptic to an extent unknown amongst the other members of the solar system. Amongst the principal planets the inclination of their orbits does not much exceed seven degrees; and, indeed, exclusive of Mercury, there is no case of one half that amount of inclination. Amongst the minor planets, however, this angle is in many cases greatly exceeded, and in the case of Pallas it amounts to nearly 35°. But comets traverse all parts of the heavens; their paths have every possible inclination to the plane of the ecliptic, and one half of those that have been observed move in a direction contrary to that of the planets; it is therefore said of their motion, that it is retrograde. The motion of Donati's comet is retrograde, and the inclination of its orbit amounts to a little more than 63°.

We shall better understand the relative position of Donati's comet and the principal planets, by referring to plate I, figure 1. The longest ellipsis represents the form of the comet's orbit; the horizontal ellipses represent those of Jupiter, Saturn, Uranus and Neptune, as viewed obliquely, and consequently foreshortened. The separation spot in the centre represents the orbits of Mercury, Venus, Earth and Mars; but in order to introduce the whole of the comet's and to maintain the proportional scale, these smaller orbits are scarcely distinguishable.

By means of figures 2 and 3, plate I, we will endeavour to explain the cause of the great amount of perturbation to which some comets are subject beyond that to which the elements of the orbits of planets are liable. Fig. 2, P₂, represents a superior planet before its conjunction with the inferior planet p₁; and P₁ the same superior planet and p₂ the same inferior planet after their conjunction. It is evident, if the orbits of P and p are both circular and concentric, that at equal periods of time before and after conjunction their distances will be equal, therefore the acceleration or retardation at the first epoch will be counterbalanced by the retardation and

acceleration at the second period, so far as the ultimate velocity of each planet is concerned and the elements of these orbits depend on the amount of centripetal force. For a time the motion of each is disturbed. Before conjunction p₁ is accelerated and P₂ is retarded, because p₁ is attracted by P2 in the direction of its motion; but P2 is attracted by p₁ in a direction contrary to its motion. After the conjunction the contrary takes place, P1 is accelerated by p2, and p2 is retarded by the attraction of P₁, because P₁ is attracted in the direction of its motion and p₂ in a contrary direction; and as the sum of these accelerations and retardations is of equal value when P and p have passed beyond that distance at which their mutual perturbation will be sensible, the centripetal force will be the same as before this disturbance occurred. This is not, however, the case with planets having elliptical orbits, since in such case the distance before and after the conjunction differs in amount, and consequently the acceleration and retardation do not balance each other. But in the case of a comet crossing the path of a planet, the permanent disturbance exceeds to a very great degree that which can occur respecting planetary bodies the orbit of one of which is included within the other.

Figure 3, plate I, represents Donati's comet crossing the path of Venus; we find not only that at the epochs when the comet is at c' c" and c" it is very much nearer planet p' p" and p" than it is after crossing the path of Venus (where the comet is represented by c1 c2 and c3 and the planet by p, p₂ and p₃), but also the direction of the accelerating force before crossing the orbit is less oblique to the direction of the comet's motion than it is afterwards. (The comet at c is neither retarded nor accelerated by the attraction of the planet at p".) If also we take into consideration that attraction is in the inverse ratio to the squares of the distances, we find that the acceleration is more than four times as great as the retardation; so that three-fourths of the acceleration affect the elements of its orbit permanently. In a foot note, page 139, we have shewn that if the velocity of a planet is increased the eccentricity of the orbit will also be increased, and the period lengthened. But there is another effect which perturbation may produce, calculated to increase or decrease the period of a comet. pointed out, in the note before named, that if the angle between the comet's path and its radius vector be decreased the period will be increased. Now,

in conformity with this law, planets perturb each other, and thus comets are, to a much greater extent, perturbed by the attraction of planets. Were it not for the attracting power of the sun, which is generally denominated centripetal force, planets and comets would move off into space in straight lines; but the sun's attraction bends this line into the curve of a circle, ellipse, parabola or hyperbola, as the case may be. And should a planet, exerting any amount of attraction, be in conjunction with the sun, this curve will be bent more than it would have been by the sun's attraction only. On the contrary, if the planet were in opposition to the sun, the If, in such last-named case, the planet's attraction curve would be less. were equal to that of the sun, the comet would for a time move in a straight line. Now, this decrease of the centripetal force of the sun must tend to lessen the angle of the comet's path across its radius vector, which, according to the second proposition of the foot note, must tend to increase the length of the period; but if, on the contrary, the centripetal force were increased by the attraction of the planet being in the same direction as that of the sun, the effect would be to shorten the period.

By a further investigation of this difficult matter, we shall find that if a comet's motion be retrograde, the centripetal force is decreased in all cases in which the velocity of the comet is increased, and increased when the velocity is decreased; so that with comets of this class both sources of perturbation tend in all cases to produce similar effects, but contrary effects with comets the motion of which is direct. Thus with regard to the elements of a comet, whose motion is direct, they are disturbed by the difference, but if retrograde, by the sum of these two elements of perturbation.

Previously to the 30th of September, Mr. Hartnup's observations were confined to the determination of the position of the nucleus of the comet, but on that night its appearance became so exceedingly interesting that we determined, in future observations, to adopt more than an ordinary amount of labour, not only in measuring the dimensions of those appendages visible by the telescope, but also the length, curvature and breadth of the tail at various distances from the nucleus. These arrangements were fully carried out on the 30th of September, and on the 4th and 8th of October, and partially so on the 11th of October. The remainder of this paper will be devoted to the results of these remarks, and to speculations de-

pendent thereon. In order to give an accurate description of these observations, it has been necessary to make use of plates, in each of which we have introduced a scale, in order to maintain the same relative proportions, as determined by actual measurement, in every figure of the comet contained in the same plate.

Table V. also gives the principal measurements; the first part is in degrees, minutes, and seconds, and the second part in miles; the latter being founded on the hypothesis that the comet's distances from the earth are those given in table III.

TABLE V.

| Date. | Diameter of Nucleus. | Diameter of First Envelop. | Diameter of Second Envelop. | Distance from centre of Nucleus to point of Coma. | Diameter of Coma at right angle to the Tail and through the Nucleus, | Length of Tail measured along the convex edge. | Distance from Nucleus to end of Tail in a straight line. | Greatest breadth of Tail. | Length of Conical Shadow |
|-------------|-------------------------|----------------------------------|-----------------------------------|---|---|--|--|---------------------------------|--------------------------------|
| 1858. | (J | 1 11 | 4 11 | 1 11 | £ 17 | 0 4 | 0 1 | o 8 | |
| Sept. 30th. | 17 | 2 1 | _ | 1 26 | 5 46 | 26 35 | 26 0 | 3 10 | 18 |
| Oct. 4th | 20 | 1 40 | _ | 1 32 | 4 28 | 34 20 | 31 30 | 6 0 | 21 |
| " 8th | 22 | 1 52 | 5 37 | 3 36 | 8 46 | 39 30 | 35 0 | 7 30 | |
| " 11th | 23 | 1 54 | 5 43 | 4 39 | 10 39 | | personal deposition | | |
| DATE. | In Miles. | In Miles. | In Miles. | In Miles. | In Miles. | In Miles. | In Miles. | In Miles. | In Miles. |
| Sept. 30th. | 5,750 | 39,000 | | 27,640 | 111,200 | 29,850,000 | 29,240,000 | 3,600,000 | 349,000 |
| Oct. 4th | 5,950 | 27,000 | _ | 25,890 | 74,950 | 35,000,000 | 32,000,000 | 6,000,000 | 375,000 |
| " 8th | 5,600 | 28,500 | 85,700 | 45,070 | 133,600 | 34,000,000 | 30,700,000 | 6,855,000 | |
| " 11th | 5,830 | 28,900 | 86,800 | 65,290 | 164,800 | | | | |

Plate II. represents the appearance of the comet as seen with the naked eye (A) on the 30th September, (B) on the 4th of October, and (C) on the 8th of October.

It will be observed that on the 30th of September, all the interesting peculiarities which this comet presented to the naked eye were observable.



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The curvature of the tail was decidedly apparent to the most casual observer, and the dark band which extended from the nucleus to the extremity of the tail was very obvious, and although the tail did not spread over one-third of the surface of the heavens which it occupied on the 8th of October, it presented the most beautiful appearance, both on account of the great brilliancy of the envelop, and the edges of the coma and tail, and the symmetrical form of the comet generally, which was that of a bent ellipse, with the axis major seven times that of the axis minor and the nucleus in one of the foci; but on the 4th and 8th of October its form was that of an irregular curve. On the 30th September, the axis of the tail corresponded with the arc of the circle, but on the 8th of October the curvature near the extremity of the tail was much greater than near the nucleus.

The curvature of the tail of a comet has been a subject of considerable speculation. Although we believe we can show that, generally, it is the result of a combination of forces, yet this is not universally the case. If this were the only cause, the curvature would always exist on the plane of the comet's orbit, and would not be observable from the earth when passing through that plane. Yet, on the 6th September, it was very obvious that the tail was bent, although we were then in that position which would give to the tail a straight appearance, if its curvature were in the plane of the comet's orbit.

With a very few similar exceptions, however, the centre of the tail of a comet coincides with the plane of its orbit; and, further, we observe generally, that the curvature of the tail increases or decreases with that of the part of the orbit through which the comet is passing.

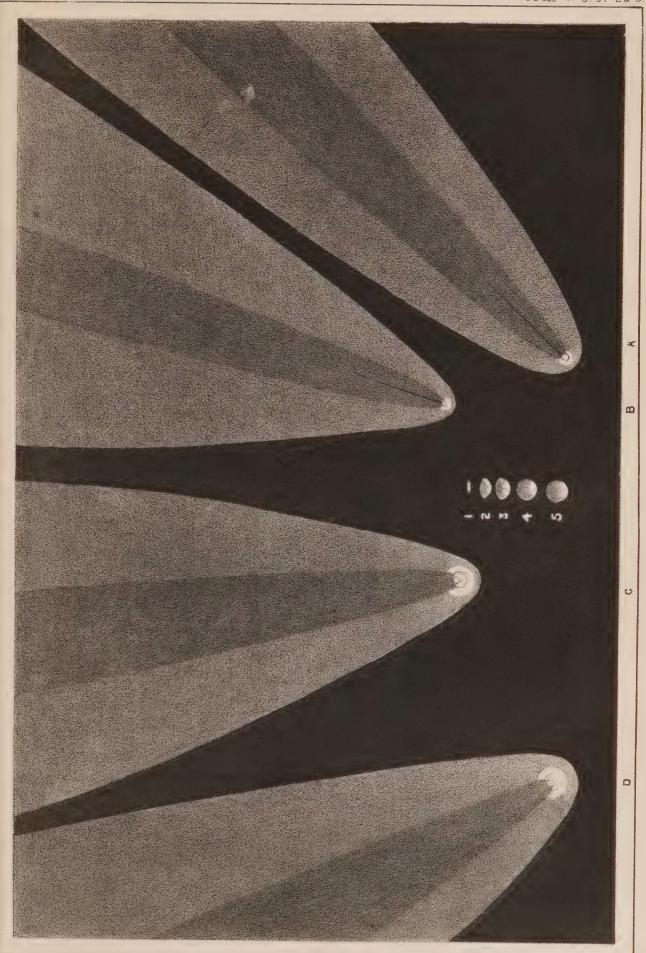
Fig. 4, Plate I. is an illustration of the law by which this curvature may be regulated.

Supposing that the tail of a comet is composed of innumerable and minute atoms, projected from the nucleus in the direction opposite to that of the sun. If these atoms were thrown off from the nucleus at a, in the direction opposite to the sun (S) with a velocity which would take them from a to b, in the time the comet was moving from a to a', they would reach the outer arc at b' at the instant the nucleus arrived at a'; because, the motion of these atoms would be compounded of that of the comet at the instant of their being projected, (the distance from a to a' being equal

to that from b to b',) and of the force by which they were thrown off. Also any matter thus projected from the nucleus, whilst passing through any point between a and a', would arrive at some point included within the curved dimensions of the tail, those atoms moving the fastest would form the front of the tail, and those moving with the least velocity the hindmost margin. Now, if the orbit a b were not sensibly curved, as in the case when the comet was first observed, the particles projected in a given line, partaking also of the motion of the comet, would continue in a line of position relative to the nucleus parallel to the line in which they were first thrown off. But this would only obtain when the motion of the comet, and, consequently, that of the atoms of which the tail is composed move in parallel straight lines. All parallel curves must possess radii, and consequently arcs, greater in proportion to their distance from the focus, which gives to an atom moving in a more distant curve the appearance of lagging behind, although it moves with the same velocity.

On the 5th October a very interesting phenomenon occurred in the near approach of the nucleus to Arcturus, the polar distance being but a few minutes different, and although the brightest part of the tail passed over the star, the brilliancy of Arcturus was not in the least degree diminished. The comet was, however, beclouded before we could complete a sufficient number of measurements to secure a correct representation of its form and position during that evening.

In Plate III. four telescopic views of the head of the comet are represented; A on the 30th September, B on the 4th October, C on the 8th, and D on the 11th of that month. The nucleus is distinctly visible in these figures. The nature of this part of the comet has given rise to numerous speculations, and even its size and figure have been differently represented by various observers whose impressions are worthy of high consideration. Still we have thought it desirable in this paper to relate throughout the results of our own observations without being in the least biassed by those of others. To us, the nucleus appeared neither semilunar, gibbous, nor horned, but when viewed under favourable circumstances presented a complete circular disk. During the periods at which the comet is represented in plates III and IV, two lines, one drawn through the nucleus and the sun, and the other through the nucleus and the earth, would be nearly at right angles; this is the position which would cause Mercury or





Venus to present to the earth a semilunar disk, and such must also be the appearance of any other spherical body shining wholly by the reflection of solar light. If, on the other hand, the nucleus shines by its own light, all sides of the disk would be equally bright. But this was not the case. When the decline of daylight first enabled us to discern any portion of the nucleus, the edge towards the sun was alone to be seen, (see fig. 1, plate III.) As the darkness increased the visible portion of the disk increased its dimensions as represented in plate III., 2, 3, 4 and 5. also, when a light cloud passed over and off the head of the comet, as was the case on the evening of the 4th October; in disappearing the nucleus would successively assume the appearances of 5, 4, 3, 2 and 1, and in reappearing, those of 1, 2, 3, 4 and 5. When, however, the comet was observed under circumstances favourable for displaying the greatest amount of brilliancy, we could not discern any difference of brightness in the various parts of the disk.

We may adduce two theories which may probably account for this phenomenon; either that the nucleus is partially transparent as a globe of ground glass, reflecting the greater number of rays on the side exposed to the direct light of the sun, but refracting a lesser number of rays from the opposite surface; or that the nucleus is composed of an opaque luminous mass, capable also of reflecting the solar rays. If the latter hypothesis be correct, the one side would be illuminated both by the sun's reflected rays and the light emitted, whilst the luminosity of the nucleus alone would be the source of the inferior brilliancy of the opposite side.

On the 30th September and the 4th October there existed, in connexion with the nucleus, a phenomenon which had not been previously described, but worthy of attention, especially in speculating on the nature of the nucleus. On the 30th of September, we observed a well-defined conical shadow, of about 18' in length, and on the 4th October its length was about 21', but it was less striking in its appearance. After the last-named day it could not be observed. This shadow must not be confounded with a dark band which emanates from behind the nucleus dividing the tail throughout its length. This band bends with the tail, its border is curved and is well-defined, and it expands as it recedes from the nucleus. All these peculiarities are opposed to the very nature of a shadow, and prove it to originate from a different source. The only probable suggestion is, that in the centre of the

tail there exists a space containing a less amount of reflecting atoms than in the rest of the tail, and that the profile of this space is the dark band under consideration. If this region were destitute of matter capable of reflecting light, no shadow could there exist. Such may have been the case on the 8th and 11th October, when the band appeared darker than on the two previous nights of observation.

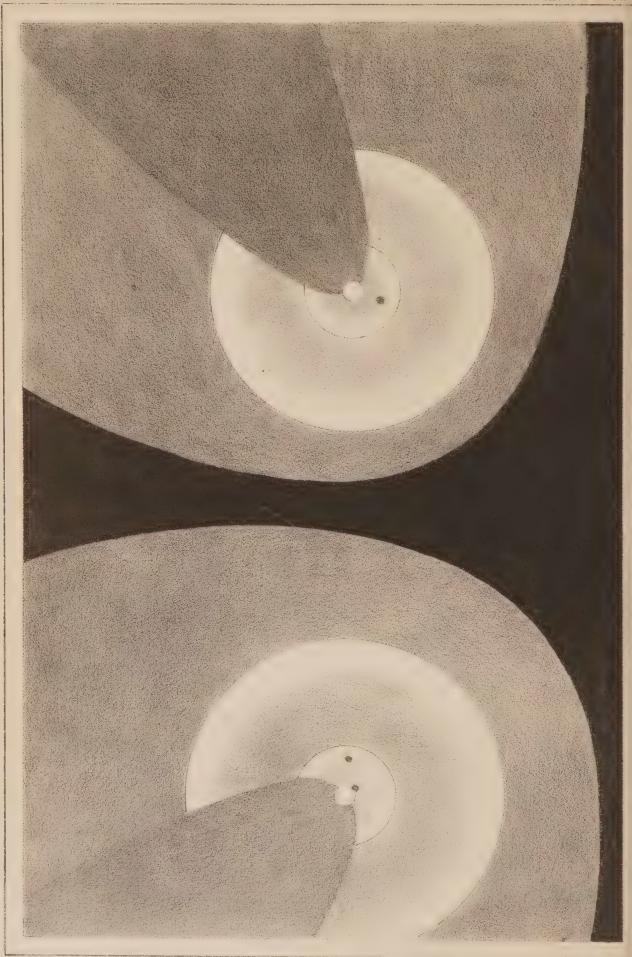
That this dark cone really consisted of the shadow of the nucleus has been doubted by those whose opinions are well worthy of notice. We therefore considered it desirable to determine, by micrometric observation, whether this apparent shadow bore the length proportional to the diameter of the nucleus. The laws of optics require that the shadow should bear the following relations. The distance of the nucleus from the sun should be to the length of the shadow, as the diameter of the sun less that of the nucleus is to the diameter of the nucleus.

Taking into consideration the ill-defined appearance both of the circumference of the nucleus and the extremity of the shadow, the measurement of the latter bears a nearer relation to that of the former than might have been expected; this, therefore, tends to confirm our opinion as to the nature of this dark cone.

Another class of those wonderful complications that exist in connexion with the larger bodies to which Donati's comet belongs, now remains for our They have been denominated envelopes; and consist of well-defined and spherical screens or caps, of dense nebulosity, apparently more luminous towards the circumference, and for the most part, but not entirely, surrounding the nucleus. Their appearance is that of a complete circular disk, having the nucleus in its centre, but partially covered by the dark band we have already described. The extraordinary changes they exhibit baffle all our attempts to investigate their nature or origin. The extent of the tail generally depends on the proximity of the comet to the sun. Not so, however, with these envelopes. On the 30th of September, when the comet was nearest the sun, there existed but one envelope, 39,000 miles in diameter. On the 4th of October, this envelope dwindled down to 27,000 miles, yet in four days afterwards its diameter had increased to 28,500, and it was then surrounded by a second envelope, the diameter of which was 85,700 miles; on the 11th they had both larger dimensions.

Early in September, on account of the great distance of the comet from





the earth, the envelope might have been mistaken for the nucleus. Such also might have been the case during the whole period that the comet was under observation, if examined only by means of a telescope of low magnifying power or of inferior definition. It has therefore been suggested that the luminosity which we regard as the nucleus might be resolved into an envelope if examined by an instrument having a still greater amount of power than those now in use and superior definition. But this hypothesis is not probable, since the envelope is not liable to be mistaken for the nucleus when its form is defined. They differ so materially in figure that it is only when appearing as a mere point the one can be mistaken for the other. Besides which, if it is allowed that a shadow was cast by the nucleus on the 30th of September and 4th of October, it is evident that the nucleus was composed of more substantial elements than those of the envelope.

Whether the nucleus is solid or otherwise is still undecided, but no doubts are entertained with reference to these envelopes that, if in fact they consist of ponderable matter, it must be rare indeed as compared with our atmosphere, since stars of small magnitude have been seen through them. Yet, on the 8th and 11th of October we observed a phenomenon so extraordinary as to throw doubts on all our conjectures, and to cause us to hesitate in our attempts to speculate on subjects connected with these mysterious bodies. [This phenomenon is exhibited in plate IV., which consists of views with a higher power of the head of the comet, figures C and D in plate III.]* On the 8th of October, midway between the nucleus and the circumference of the inner envelope, there existed a black spot, about 30° from the front of the nucleus towards the north. The spot was still visible on the night of the 11th October, occupying nearly the same position, but in addition to this, a second spot was then to be seen very near the front of the nucleus.

We have now, indeed, to do with a mystery! We have doubted whether

^{*} This spot had been previously detected by Mr Lassell, who informed Mr Hartnup, in a note, that there existed something extraordinary near the nucleus, and enclosed a drawing. Mr Hartnup did not, however, examine this sketch till he had depicted the results of his own observations. Mr Hartnup then desired Mr Towson to examine minutely around the nucleus, and he immediately noticed the phenomenon under consideration, and delineated it; and then the three sketches were compared, and were all found to agree. It is also satisfactory that two telescopes were employed—a reflector and an achromatic refractor.

these envelopes even consist of ponderable matter. They have been called into existence in a few hours, although occupying spaces extending to 85,700 miles in diameter. Yet, impressed on so fugitive a mass, we find a dark spot enduring for more than three days. Let us imagine a spot continuing fixed for days amongst the clouds that are floating through To what surmises would such a phenomenon give rise! our atmosphere. Yet a cloud must be substantial indeed, when compared with the materials of which these envelopes are composed. We can only add, that we shrink from the task of attempting to comprehend the nature of an existence verging on "the brink of dreary nothing," yet capable of receiving an impression enduring for a far longer period of time than was necessary to call into existence its volume, amounting to eighteen millions of millions of cubic miles.

OUTLINE OF THE SEA COAST OF CHESHIRE.

By the Rev. A. Hume, D.C.L., &c.

(READ 19TH MAY, 1859.)

The adjoining county of Chester, which constitutes part of the field of investigation of this Society, presents but a small portion of its border to the sea; but that portion exhibits some features of great interest. In examining its ancient condition, there are three distinct lines of inquiry. For example, we might examine it first, in time, viz. its History; second, in place, viz. its Topography and local relations; or, third, its evidences on these and other subjects, viz., illustrations of History and Topography. It is the second of these subjects which lies before us at present; or rather a particular department of it;—the comparison of Maps of the Hundred of Wirral, or of that portion of it which adjoins the sea.

The subject of Topography, taking the term in a wide sense, is one full of interest; but I am afraid it will not be so at present, from the mass of dry detail which I am about to produce. It is also imperfect, indeed I may almost say intentionally so; that, like a catalogue of books on some subject of interest, it may from time to time receive additions from other hands.

In the more ancient English treatises there is a vagueness of expression which bewilders and surprises one who is accustomed to the mathematical accuracy of modern times. Every one knew when he turned to the right or left, but he perhaps paid little attention to the angle; and he journied for a long or short distance in a particular direction, measuring by the time spent. Thus, in the two important elements of direction and extent, none but vague ideas were received or conveyed; and of course the maps formed from such impressions are frequently such as very inexperienced school boys would draw upon their slates.

An Anglo-Saxon map of the tenth century, is one which exhibits these characteristics; and I notice it because it is published in Knight's Pictorial History of England, and therefore easily referred to. It exhibits most of the world as then known, but of course very incorrectly in magnitude and

direction. The east is at the top; the British isles occupy the north-western corner, and Great Britain hangs like two door posts and a lintel over Ireland and the Isle of Man. Wales appears to project from the most northerly point, and the sea beyond is studded with islands, almost equal in area to Ireland or Britannia proper. (Map No. 1.)

One which gives us a more accurate view of our own part of the World, is a map of the British Islands about the middle of the 16th century. It is taken from the "Cosmographia Universalis" of Munster, my own copy of which is dated 1559, though the book was printed at Basle in 1550, and dedicated to the Emperor Charles V. It gives Anglia, Scotia, Wallia, Cornewall and Hibernia; and the towns are Edinburg, Londis, Ochsenfurt, Douer, and Vatford, in Ireland. There appear to be forests in various parts of England, Scotland and North Wales, but nothing can be conjectured respecting the modern districts of Lancashire and Cheshire.

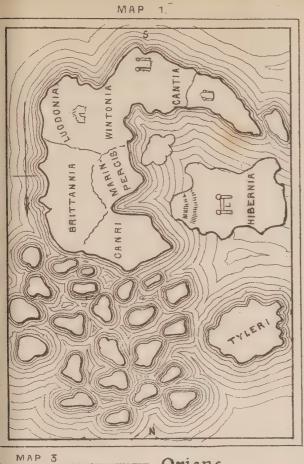
Perhaps this is the proper place to mention that the earliest map which pretends to give individual places in these shires, is also the earliest with which we are acquainted, viz.: Ptolemy's. There had been numerous general accounts of the island and its inhabitants previous to his time, but none in local detail. He seems to fuse the two rivers Mersey and Ribble, and has thus presented a puzzle to antiquarian inquirers and geographers ever since. (Map No. 3.)

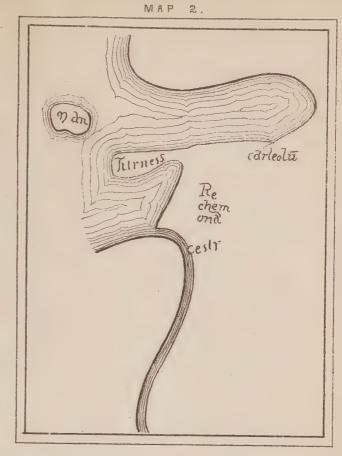
Among the attempts made to explain Ptolemy, is one in "Horsley's "Britannica Romana," 1732, fol. He reduces the statements as far as possible to order, and tries to make his statements harmonise with the facts of modern topography. This of course presents serious difficulties; for it assumes that the relative condition of land and water has remained nearly unchanged for a period of 1600 years: whereas we know that even since Horsley wrote, changes of considerable importance have been going forward. (Map No. 4.)

In the King's Library, British Museum, there are two maps in the MS. of Matthew Paris,* supposed to have been drawn by his own hand about the 13th century, "Britannia, nunc Anglia, quæ complectitur Scociam, Gallweiam, et Walliam." To the east of London, part of the country is wanting, and there is written, "si pagina pateretur, hinc, total insula largior esse debet." The north-western counties are very peculiar; they could

^{*} Published in Gough's British Topography, vol. i.

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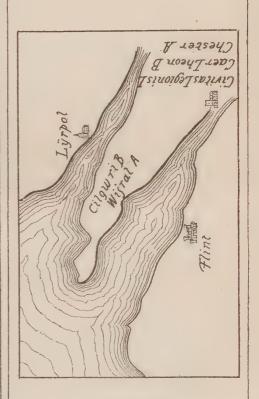




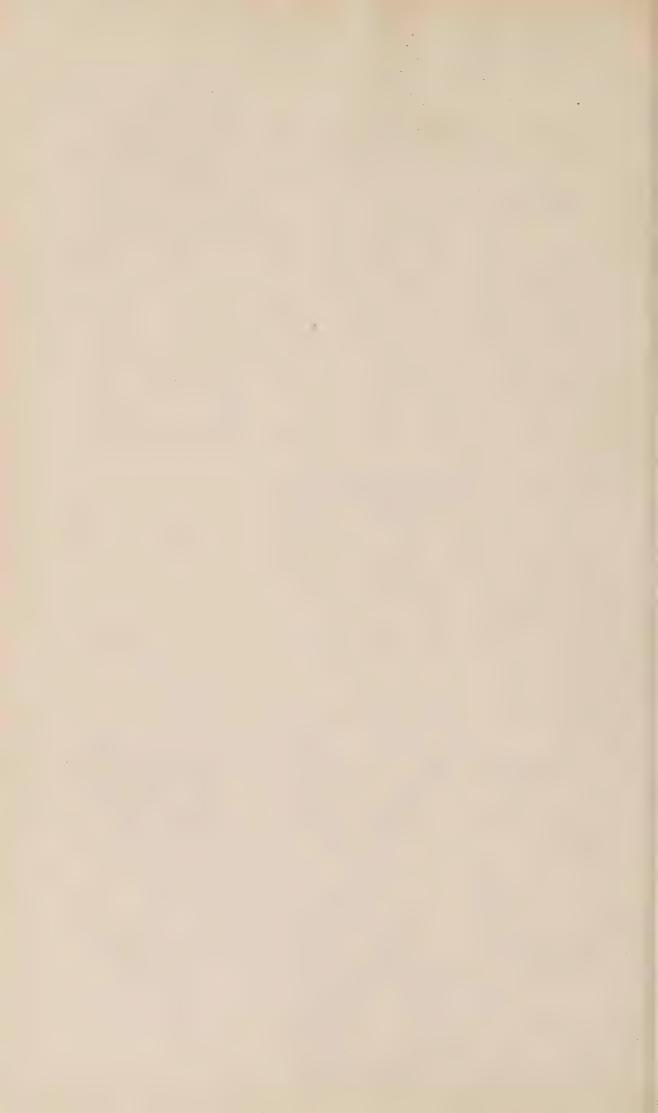
Oriens Hibernia

Occidens





Cambri Typus, Cir 1575.



never be recognised from their shape, and only four places are marked. These are Cestr, Rechemond, Carleolum, and Furniss. (Map No. 2.)

The earliest map that I have found of this particular district is dated 1565, but it does not exhibit any portion of Cheshire. A broad belt of sand lies along the Liverpool side of the river, and the portion of it which I exhibit extends from the Alt river to Garston. It is a map which was constructed for the use of the Heralds; and it contains, accordingly, the mansions of the gentry. Thus "Robt. Blundell de Ince," "Blundale de Crosbie," "Ric. Molonex de Sefton Ar.," "Willm. Moore, de Bancke-"howse Ar." The places are "Formby chap.," and "Anker chap.," north of the Alt; "Sefton church," "Leverpoole chappel," "Garston chap." and "Tockestath parck and towre." It would thus appear, that three centuries ago, the principal building of Liverpool was regarded rather as belonging to Toxteth; and the pictures on the map confirm this impression.

In a work printed in 1575, we find an engraved map of the district on a small scale. It is in "Cambriæ Typus, Auctore Humfredo Lhuydo "Denbigense, Cambro-Britanno." The tongue of land known as Wirral stretches far out into the sea; there is no island but a *peninsula*; and it gives one the idea that a large piece of land is nearly separated,* but still partially attached.

In a double folio atlas in the King's Library, is an engraved County map, "Cestriae Comitatus, (Romanis Legionibus et Coloniis, olim insignis,) vera "et absoluta effigies. Franciscus Scatterus Sculpsit 1577." In this, the internal hills are denoted, as at Wallasea and West Kirkby; Grange, Melse parva, Melse magna, and Moreton are given; Bydston represents an enclosure like a park; and Poulton appears as "Poton" beside Wallasea. Hilbre is a distinct island: but the part of the coast opposite it projects much further to seaward than at present.

That this was the actual shape of the land, and that it was not merely so represented on an ill-drawn map, is obvious from the outline given of another in the same collection. "Lancashire Comitatus pelatin: vera et

^{*} There is a tradition that a map in Mostyn Hall, Flintshire, represents cattle grazing on the Hoyle Bank; but I was unable to see it, if it really exist, when I called for the purpose. Cattle could reach Hilbre Island from the shore at present: and besides the ancient engravers and draughtsmen were not very scrupulous about the animals with which they decorated their maps.

"absolute descriptio, 1577." Both maps appear to have been in the possession of a Herald; for on the back of the Cheshire map is a list of the magistrates of the county including Ricardus Birkenhead; there are also the posting regulations, the distances and the prices, from London to Ireland, in 1580–1. On the back of the Lancashire map is a MS. memorandum of the gentry in the various Hundreds of the county. It was common, at the time, to write over or under particular places on a map the names of families resident there who were entitled to armorial distinctions; and on the face of the Cheshire map there is an illustration of the practice. Under Seacome is written the word Melsh; showing that a gentleman of the name of Meols, taking his name from an adjacent township, popularly called "Melsh," resided* there.

Several editions of Saxton's map appeared from 1579, for upwards of half a century; but little change appears to have been made to that of 1630, except in the title. "Walase" is a peninsula with no town marked on it; Bidston, Mortyn, and West Kirkby are marked; but no other place appears towards the sea. In Lancashire, Meols is given beyond the modern Southport, and Formby is at the extremity of the cape or projection.

In the Rawlinson MSS. in the Bodleian Library, Oxford, there is a map dated 1588. Its full title is "A Description of the Countie Pallatine of "Chester, a work deserving to be better handled. But want of cunning in "ye author was ye cause. Collected and Sett. down by Wm. Smith, "citizen of Noremburgh." In this, the market towns, castles, parish churches, gentlemen's houses and villages are distinguished by separate marks: and places of various kinds are given, to the number of about 68, in the Hundred of Wirral. "Meoles m:" and "Meoles par" are both given as villages: and the shore still projects far to seaward. The places on the Lancashire side of the river are very suggestive, "Lirpole" being both a market town and a castle, and "Earton" a village. Below both Neston and Ness is "ye noo key," like a little island in the water; the mouth of the Mersey is called "Lirpole Haven," with, of course, the Black Rock, the site of the modern Rock Lighthouse.

A map of Lancashire, by the same hand, ten years later, tells us who he was. The visitation of Lancashire, made in 1567, is copied in 1598, by

^{*} On the Lancashire map, under Bankehall is written "Moore," and over Liverpoole, "Duch, Lancastr."

"William Smith, Rouge Dragon." Of Cheshire, nothing is given but "Werall part of," showing a large projection into the sea at the Dove Spit; and "Helbree Insula," very large in proportion to its actual size. As spelling proceeded, in those days, a good deal on phonetic principles, we have the pronunciation of such words as Darby* Hundred, West Darby, Marsey fluvius. The mode of connecting persons† and places, already noticed, is here fully exemplified.

The maps of the seventeenth century are better known; and the excellent one of Speed, himself a Cheshire man, requires only to be alluded to; especially as my object is to refer to those which are less known, noticing not only their special points but their coincident testimony.

Michael Drayton's "Polyolbion," written in 1612, alludes only in general terms to the natural features of this district; and his map is a figurative one, personifying Mersey, Dee, Hilbre, Chester, Delamere Forest and the "Corner of Werrall." It represents a considerable projection to seaward at Meols; and one would infer from his lines that there was dangers of the water making inroads on the land.

^{*} An ancient building with the inscription "West Darby Work House," was taken down in Low Hill, a few years ago; and in pure English Clerk, Ser-geant, still retain the old sound.

⁺ Lerpole (Cross), Crosby (Blundell), Bankhall (Moore), Lidiate (Ireland,) Speke, (Norris), Hut (Ireland), Melling (Molineaux), Croxteth Hall (Molineaux), Sefton (Molineaux).

[†] Delamere Forest is a huntress, with the dogs in full chase of a stag; Chester is a venerable lady with a mural crown; Mersey and Dee are river-gods rising from the waves; and Hilbre and the Corner of Werall (West Kirkby), are men each apparently looking out from his elevation.

§ Here where the Riuers meet, with all their stately traine,

Proud Mersey is so great in entiring of the Maine,
As hee would make a shewe for Empery to stand,
And wrest the three-forkt Mace from out grym Neptune's hand,
To Cheshire highly bound, for that his watry store,
As to the grosser Loughs on the Lancastrian shore.

* * * * * *

[These rivers] come at length, where Mersey for more state
Assuming broader banks, him selfe so proudly beares,
That at his sterne approach, extended Wyrrall feares,
That (what betwixt his floods of Mersey and the Dee)
In very little time deuoured he might be;
Out of the foaming surge, till Hilbre lifts his head,
To let the foreland see how richly he had sped.
Which Mersey cheeres so much, that with a smyling brow,
He fawnes on both these Floods, their amorous arms that throw.

In Hollar's maps, otherwise known as the Quartermaster's maps, 1644, "Wallasse" is a complete island with a town; Bydston and W. Kirkby are marked; and Formby in Lancashire, is as before. In Jansson's "Angliæ Regnum," 1645, Wallase and Oldfield (near Neston,) are the only places in "Werall."

We may here notice, in passing, some facts respecting the names and character of the places. In James's "Iter Lancastrense," (1636), allusion is made to the sand hills blown up on the shore, both in Cheshire and Lancashire.

Ormeschurch and ye Meales
Are our next jorney, we direct no weales
Of State to hinder our delight. Ye guize
Of those chaffe sands, which do in mountaines rise,
On shore is pleasure to behould, which *Hoes*Are called in Worold: windie tempest blowes
Them up in heaps.

Mr. Corser, who edited the volume in 1845, for the Chetham Society, is inclined to derive Hoe from how a mountain or hill, as in Fox-how, Torpen-how; and Meols from moel a large heap or pile. The parish of North Meols, and the township of Formby in continuation of it, near which was the ancient Ravinsmeols, extend along the Lancashire shore for more than twelve miles; and as they everywhere present the "Hoes" to the sea, Meoles has naturally been interpreted as meaning the district of the sand This explains in like manner, the names of the two Cheshire townships; and is evidence respecting the uniform character of the coast, wherever the sea margin may have been. The North Meols, one part of which is now very populous, was then almost a desert; for it is said that a man might be as thoroughly a hermit there as in a little island off the Calf of Man. But that Meols in Cheshire could not have been in this condition, on the contrary, that it was more populous than the neighbouring places, is evident from Schenk's map* published a few years later. He gives Formbye, Eston (Sefton), Kirkbye, and Garston as pagi; Bijdston is also a pagus; but Meols, occupying the position nearly of the modern Hoylake, is an oppidum. In Visscher's map 1650, (new edition 1686,)

^{*} Published at Amsterdam, from Sanson and other authorities, and dedicated to William III.

⁺ Two great sand banks, to seaward of the end of Wirrall, enclose "Hyle-lake als." Highlake." Mersey is noticed only above Frodsham.



Meols is the only town given in the whole Hundred: Wallasea point is marked; and there is a house to seaward of the sand hills, on the road round the coast. Another road* passes direct from Frodsham to Meols; but in the Alphabeth Tafel given on the margin, neither the latter nor Wallasea is given as a market town.

Passing over several maps engraved in Holland, all of which must have been copied as accurately as possible from English originals, those of Sir William Petty and Grenville Collins are particularly deserving of notice. The former was originally Physician to the Forces in Ireland; and being dissatisfied with the mode in which the survey of the forfeited lands was conducted, projected and completed the survey known as the "Down "Survey," with such accuracy and expedition as surprise all who have attended to the subject since.† Though external to his own subject, on one of his maps is given a view of part of the Cheshire coast; and vast sand banks are seen enclosing deep water between them and the land. One such bank lies right opposite the mouth of the Dee.

But the principal maps of the district, for that or any previous period, are those of Captain Grenville! Collins; for they show us the exact condition of the banks at the time of his survey, *i.e.* in 1687. Now, as we know their present condition, we have before us the changes of 170 years; and we can, from the known tendency, reason back with moral certainty for

^{*} The reader must not suppose that these were like our modern turnpike roads, or that they were necessarily "made-roads" at all. They were probably "bridle paths," used at best for saddle and pack-horses. Nearly a century later, viz. in 1770, the important road from Preston to Wigan, is thus described by Mr. Arthur Young. "Travellers will "here meet with ruts, which I actually measured, four feet deep; and floating with mud "only from a wet summer; what, therefore, must it be after a winter? The only "mending it in places receives, is the tumbling in some loose stones, which serve no "other purpose but jolting a carriage in the most intolerable manner. These are not "merely opinions, but facts, for I actually passed three carts broken down in these "eighteen miles of execrable memory."

⁺ A full account of it by his own hand, was printed in 1851, by the Irish Archæological Society, under the editorial care of Major Larcom.

[‡] Great Britain's Coasting Pilot. By Captain Greenville Collins, Hydrographer in Ordinary to the King's most excellent Majesty. London, fol. 1760. [He was appointed by Charles II. in 1682, to make maps and charts, and spent seven years in the task. Most of the previous ones were Dutch, and very incorrect. He surveyed Liverpool and its neighbourhood in 1687; and gave in his Report in 1689.]

170 years more, and with a high degree of probability for a much longer period.

It may be remarked, in general terms, that at that period, the mass of the Hoyle sand or Bank, lay right opposite the river Dee and the Welsh coast, extending for miles, and pointing in a direction parallel to that of the coast of Cheshire and Flintshire. The waters of the Dee, therefore, except a small portion which got round Hilbre Island into Hyle lake, discharged themselves along the Welsh coast; and the channel by which Chester was approached, lay almost in a straight line between Hilbre Island and Great Orme's Head. In the middle of this channel, and three miles beyond the present Point of Air, rose a sand bank; and here the Hyle sand and the Welsh coast approached each other most closely. This bank seemed a sort of natural stepping stone between them, or as the remains of their connexion at some remote period. As it was invariably passed on entering the port of Chester, it was known as "Chester Barr."

In Captain Collins's directions for sailing over it, he mentions the best line of direction, and adds that the shoalest of the Bar is "about two little "miles from the shore." He adds, "then you will presently have deeper "water, and may keep along by the Main in what depth you please, keeping "Hail or Hyle Sand without you, which always showeth itself. "is always above water, except an hour or two at High water on a Spring "tide, and then it showeth by a Ripling." Here then we arrive at an A bank whose greatest length was thirteen miles, and important fact. greatest breadth three and a quarter, showed itself at all seasons; "the "Tides rising so high as 5 Fathom at a Spring, and 3 and an half at a "Niep." We have what may be called a plan and a section of the Hoyle Bank from the inside; but some allusion is made to its outside also, in the "Directions to sail into Hyle or Highlake and Liverpool." It is there said that vessels can "run in, keeping close along Hyle sand, and so into "Hyle or Highlake and anchor." Hence it appears that there was deep water just beyond this Hyle Bank; probably owing to the constant motion At this anchorage, "the great ships that of the tide of the channel. "belong to Liverpool put out part of their lading, till the ships are light "enough to sail over the flats to Liverpool." In other words, a ship of the time, partially laden, could sail over the Burbo Bank at high water; or in most conditions of the tide, could turn into the river, round the Black

Rock and Perch, having passed through the channel opposite Wallasea which afforded still greater depth.

The following inferences therefore, appear not only allowable but irresistible, on the most authentic information which we possess. (1) That within a period of two centuries a sand bank occupied the position of all the present docks* on both sides of the Mersey; (2) that the Burbo sand could then be reached on foot at low water; (3) that the Dove point, with a much more elevated surface, had been dissociated from some continuous† piece of land; (4) that the external configuration of the Cheshire shore and the Hoyle Bank exhibit unquestionable evidences of previous union; and (5) that the internal configuration of the Hyle lake,—the concave curve corresponding exactly to the convex one,—shows that the channel had been produced in comparatively recent times, by mechanical agency.

There is a very interesting account of an embarkation here, lately printed by the Camden Society. It is the "Diary of Dean‡ Davies," who was chaplain to one of the regiments of the Prince of Orange, and who sailed from Hoylake for Ireland, in 1690. The following are a few of the entries.

Saturday, 26th April.—"We dined at our lodging [at Chester], and after "dinner they all grew very busy in sending away their things to "Hoylake, where lay our recruits of horse, being four hundred, and "the Nassau and Brandenburg regiments."

Saturday, 3rd May.—"In the afternoon, I put my trunks, bed, saddle, "and hat case on board Mr. Thomson's boat and sent them to "Hoylake."

Tuesday, 6th.—"In the morning, we took horse for Hoylake, and passing by Neston, we came there about one o'clock."

Wednesday, 7th.—"About nine o'clock came on board, and at eleven "shipped our horses. The Major and I walked a few "miles on the strand, and went into two islands \s in the bay, and "then came on board."

Thursday, 8th.—"In the afternoon, we shipped the Major's tumbril, and "came down to the roads' mouth, where we lay at anchor all night."

^{* &}quot;The ships lie aground before the town of Liverpool; 'tis bad riding afloat before "the Town, by reason of the strong Tides that run here, therefore ships that ride afloat "ride up at the Sloyne, where is less Tide." See also, the notice of the map of Lancashire, 1565.

⁺ The top of the Hoyle Bank was then more than half the height of the present Leasowe Light-house.

[‡] Edited by Richard Caulfield, B.A., 1857.

^{\$} These must have been Hilbre and the Middle Eye.

Friday, 9th.—"In the morning we set sail, the wind being E. N. E., "and steered N. W. by N.; we had but little wind, and got not out "of sight of Wales all day."

Now it was in this very year, (1690,) that an "Index Villaris" was compiled by John Adams, of the Inner Temple, and the relative importance of the neighbouring places deserves to be noted. Wallazey is represented as the seat of one gentleman; but neither Leasowe nor Seacome is given. Kirkby West, is merely a parish, rated in the King's book; and Birkenhead is the seat of a Baronet. But Meoles is a sea port town, and the seat of one gentleman! On the other side of the Mersey, Formby is the seat of two gentlemen; and Liverpoole is a seaport, the seat of more than three gentlemen, and sends two members to Parliament. Hoylake, which is now the name of a village, then applied to the water merely.

The map which is given in Gibson's Camden, 1695, introduces no new feature. The sand bank of which the Dove Spit is a mere projection, includes Hilbre and the two smaller islands; and Meoles is still a place of importance. In "Ogilby's Britannia," published three years later, as a large folio Road-book,—"Chester, alias West Chester" is represented as still "maintaining great intercourse with Ireland, this and Holyhead being "the principal places of taking shipping for Dublin."

Omitting several unimportant allusions to the district, it is curious to notice those places of the name Kirkby almost continuous along this short line of sea coast. On the Dee there is West Kirkby, which gives name to the entire parish; then Meols, the greater section of which was known as Kirkby* Meoles, and finally Wallasey, known only as Kirkby in Waley till near the beginning of the 16th century. The first and third of these contain churches, and have done so, we have reason to believe, as long as the names have been given. Why may not the second have contained a church also, at a remote period? I am aware that we should act with caution in the matter of local etymologies; for even on the spot we find mere words leading to mistakes respecting facts. In Gastrell's "Notitia Cestriensis" the following entry appears under the head of Wallezey.

"There were formerly two Churches here, one called Walley's Kirk, "situated in ye present Church yard, ye foundations of web are

^{*} Harl. MSS. qu Gastrell I. 177. n. It is more usually called "Mykel meles," and "Meols magna."

"yet visible: and Lee's Kirk, near a narrow Land still called Kirk"way; but wⁿ one became Ruinous and y^e other wanted a Priest, they
"were both taken down, and y^e present Church was built in their
"stead. Walley gave these Lands, called the Nar Crook hey, to y^e
"High Altar, and to y^e Priest for ever, for a burying-place in y^e
"Chancell belong^g to this Church. This deed of gift was in the
"Parish Chest, and read by H. Robinson, Schoolmaster, from whom
"I received this Information, an. 1718.—Rect's Account.

The Rev. Canon Raines, under whose able editorship the Notitia was issued by the Chetham Society, accepts the whole of this statement as correct, though it is only for the latter part of it that Mr. Robinson produces any authority. The statement, however, receives apparent corroboration from the fact that the Rectory was formerly in two medicties, and that a Chaplain was maintained in the parish by the Priory of Birkenhead. But on the contrary, there is no such benefactor as Lee mentioned in history; there is no such "narrow land" in the Parish; and no such name as "Kirkway" either known by tradition or visible on maps of any kind. Is, then, the whole story without foundation? I think not, but that Mr. Robinson was misled by etymology.

In ancient records, we actually find a name very like Lee's Kirk applied to the district; but on examination, it changes its form like a dissolving view, and melts into the modern Liscard. We find for example the forms Liscark,* Linscarke,† Liscarte,† Lyse ark,* Lystarke,‡ Lystherd,* and Liscard.*

The next map of importance is that of John Mackay, surveyed in 1732, and engraved on a scale of eight inches to seven miles. It is in the Bodleian Library, Oxford. This is a most important map, showing the causes of the changes which have occurred in the river Dee and near its mouth during the last century.

On the margin of his map is engraved the following:-

- "From Blacon p^t to Burton h^d y^e course of y^e river has run nearly "always y^e same, and is about 11 feet lower than y^e surface of "Saltney Marsh."
- "The fresh water and quarter ebb do still run from Burton head thro"

^{* &}quot;Idem Reus tenet medietate vill de liscark, &c."—Holme, Harl. MSS.

⁺ In "Nomina Villarum quæ sunt infra Baroniam de Halton."—Erdeswick, Harl. MSS.

[‡] A marginal reading beside Lystherd.—Holme.

- "Dinner Wharfe in before Park gate, who still preserves ye Navigation there, and only from thence ye course of ye river and ye reflux
- "of ye tyde can best scour and keep open Hyle Lake and ye Barr."
- "[Across from Flint to Gayton] is another course why e river may take between ye sands into ye Main Channel and was so intended to pass, by Mr. Yarranton, the first projector of a New Cutt, in 1677."
- "Between Fearn Wharf and ye out scar not 30 yards wide, if this be "choaked up ye Navigation in ye Hoyle Lake will be lost."
- "By ye Bill depending in Parlt and ye Undertaker's protracted survey of "ye river Dee it is evident—
- 1.—"That ye almost straight and uninterrupted course of ye river is to be "turned through an unexperienced Cutt, and from thence through "uncertain crooked channels over loose shifting sands."
- 2.—"That ye sand and soyl in ye Cutt is no less than Six Millions of "solid yards, ye greatest part thereof is proposed to be scoured as "fast as possible towards Hoyle Lake and ye Barr."
- 3.—"Between Chester, Flint and Park gate, 7 or 8,000 acres are pro"posed to be gained from ye sea, by wh means no less than 200
 "Millions of tons of Tyde will be prevented from flowing twice
 "(twice in 24 hours,) wh on ye reflux acquireth the greater velocity
 "to scour and keep open ye Lake and Barr."
 - "Whether these ill consequences wh must certainly attend "the present undertaking are not more likely to destroy "the present navigation in Hoyle Lake and the river Dee, "rather than to recover and preserve a better is humbly "submitted to ye Rt. Hon. the House of Lords."

[The channel was then close along the E. side of the Dee from Blacon Point to Burton head,]

This prophecy, founded on reason and argument, has been almost literally fulfilled. Hoyle Bank has been cut in two as with a saw, and the mechanical agency of the water alone, has been disengaging and removing material to new positions at the rate of about a million cubic yards annually. This is at the rate of about 1400 yards per tide.*

In 1760, a survey was made by Mackenzie, and the banks were found to have changed materially since even Mackay's time. Mackenzie's lines for the banks are engraved by the three engineers, Telford, Stevenson and Nimmo, who in 1828, made surveys for a great ship canal from Wallasea

^{*} A remark of Lieut. Wm. Lord, late Marine Surveyor, at the port of Liverpool, may here be mentioned. He said that many of the smaller banks change their dimensions so rapidly, that in surveying them he could scarcely credit that they were the same places which he had noted with great care only two or three years before.

Pool to Hoylake at Hilbre Island. In 1772, a very excellent survey was published. A plan of the lands belonging to the river Dee, by Thomas Boydell of Denbighshire.* The copy which I saw was in the Bodleian Library; the original was said to be in the river Dee office.

The following memorandum may be briefly added. In 1774 and even in 1798 Parkgate was still a port, holding intimate communication with Ireland; and in 1761, the road from Chester appeared to stop at Parkgate, a narrow bye-lane leading across to the ferry on the Mersey at Birkenhead. In Burdett's map of 1794, the Bathing Place is given at Great Meols, as if it had been even then, an embryo watering place; and the shore road lies along the heath and sands to seaward of the present Leasowe Castle. Much of this road can still be traced, but the rest has disappeared in the inroads of the sea. At the position of the modern Hoylake there appears to be but one house, and that to the landward of the high road.

This brief review brings this branch of the subject down to near 1800 or the beginning of the present century. Since that time, it is better known, by observation and the report of living witnesses. There is surely not only primâ facie evidence, but conclusive proof that the coast line has undergone material changes.

I might show what is possible in similar cases, by alluding to the encroachments of the sea on the eastern side of Yorkshire, so that a breadth of several miles has been wholly swept away; or I might quote the example of Formby, almost at our doors, which within the last century has seen the two extremes of (1) a populous village and little seaport, and (2) a wilderness of sand, without the vestige of a human habitation.

Looking back to 1687, [170 years] we see a territory equal to a large parish, barely submerged or not quite so, in one of the undulations of surface which Geology tells us the district has undergone. We see the way open to it at low water, and the land stretching out its hand to unite the broken link.

At subsequent times, we recognise a large village, called by comparison a town, (oppidum) giving name to the Parish or district of Kirkby Meols, and reckoned as the seaport of the place. We find it giving name to a distinguished County family, one member of which was Mayor of Chester

^{*} Published by his brother J. Boydell, in ten sheets.

in 1357, another of whom was living at Seacombe in 1577, and another lived on his own property at Meols in 1580 and 1591.

Where is now this seaport, or town, which was called so by way of eminence, to distinguish it from mere villages? It has decayed and passed away like a second Formby, or rather Formby is a second Meols. The position assigned to the town corresponds with the "Meols Stocks," and is as nearly as possible that of the antiquities which have been found during nearly half a century; just as the old coast lines coincide with the black earth, noticed so early as by King, in his "Vale Royal of Cheshire."

The name Meols is Ancient British, while other local words in the neighbourhood tell of the Saxons and the Danes. We can thus trace them by their respective tongues, as we can in Archæology proper by the products of their handywork and the contributions to their necessities. Like Belzoni at the Pyramids, or our own countrymen at Perranzabuloe in Cornwall, we can here restore it to Geography and replace it on the map. It is truly a melancholy pleasure, yet it is a pleasure, to touch the dry bones of centuries, to clothe them for the moment with flesh, and to ask them to tell their interesting tale. The details of that story, however, we must reserve for a different paper.

ON THE USES OF LEARNED SOCIETIES: AND IN PARTICULAR OF THE HISTORIC SOCIETY.

By J. T. Danson, F.S.S.

(READ 14TH APRIL, 1859.)

For all human institutions there comes a time (and for some it were well if it came oftener,) when they are called upon to justify their existence by a display of their uses. As to the unfruitful tree, especially, is apt to be asked the question,—"Why cumbereth it the ground?" And in these days—or in any days it were well to live in—if there be a good answer it must, to be serviceable, be ready. Thus it was that, when I was asked, and consented, to address you this evening, I chose the topic on which I am about to speak.

The uses of what are called "Learned Societies," are, following their composition and their purposes, extremely various. In London, and in the other great Capitals of Europe they are determined, in direction, by the science especially cultivated, and, in method, by the state of that science. In Provincial Towns like our own, their duty is determined rather by the intellectual tendencies of the locality. In some respects our office is the nobler for this. It is less departmental; and may justly and usefully concern itself with topics larger than can be brought within the limits of any single science.

But in one respect these societies are all alike. They seek to develope and to apply the divine laws imposed upon man, and all things with which he is concerned; and, so seeking, they all recognise the invariable and universal character of these laws. For this is the basis of all learning. If we take the guidance of the atomic theory—offspring of a Lancashire brain—and, armed with the microscope, descend into the infinity of space that lies under our hands; or, with the telescope, ascend into that only more palpable infinity, where the stars allure and reward our scrutiny—or, casting our regard backward into the past, or forward into the future, track through the double infinity of time the palpable or possible relations of our destiny to the universe at large, we come back ever the more surely as we have taken reason for our guide, fraught with the conviction that all is

under one dominion—all bound together by laws ever the same, and every where prevalent. And further, that our progress, as a race, is wholly dependent upon our knowledge of these laws.

The first man who launched a canoe into the sea, learned the fact that hollow bodies float in water, as perfectly as we know it. But we have learned the law; and so can apply it in an almost infinite variety of instances. Other and higher laws we do not yet know; but they as certainly exist. The ship riding at anchor in the tide-way of the Mersey, does not more implicitly obey, in its ceaseless heaving motion, the dynamic law of displacement, than do the outgoing and incoming trade and population of our port obey, in their social relations, laws of equal certainty, though yet nknown to us.

As a Historic Society, we are essentially retrospective. It is to the past—that vast aggregate of accomplished facts, every one of which, by most imperative need, has preceded those now passing before us—that our attention is most properly directed; and directed that we may read its meaning. Why, then, has all this gone before? Why this long array of Poets, Statesmen, Historians, Soldiers, Men of Science, Seamen, Traders, who for thousands of years have been leading our race very consciously over the work of the day, and with less consciousness along the devious dimly-lighted track yet trodden upward from barbarism to what we now agree to call civilization. Why, unless it be that we should enter upon our career with better means and brighter prospects than any they ever possessed?

Our newest things are old in preparation. The buds that threw abroad their clustered leaves to the sun of yesterday, were swelled to bursting by that of the day before; and all the boundless wealth of Nature and of Art now offered to our contemplation, is but the slowly-gathered hoard of a line of yesterdays, true sisters, every one, to the day we are now rapidly running to the close of. Time has gathered all to the garner, and sent it on to us. It is all with us, even now. And how go we on with the accumulation? We buy and sell, and dig and sow and reap, and eat and drink, and labor and lie down, and see that there be others to come after us to do the like; and there, for most of us, it ends. Some occasional glances we do indeed give to what is grand, or mysterious, or unfathomable, or beautiful, around us; and we are well repaid. The vaulted sky gives

us back a sense of magnitude and tranquillity—the vexed ocean and the storm quell us with a sense of vast external power—and sunlight makes even the moody and unobservant glad. But for the most part we are apt to trouble ourselves no more with the remoter origin or issue of what is going on around us, than if we had long ago gravely taken counsel together, and set down all we do not ourselves grasp and peddle with, as a gigantic impertinence. The harmony of Nature is in nowise marred by our negligence. She can spare us. Now, as ever, she has open-eyed votaries, faithful servants, heroic workers, who do slowly by few hands, what might be done rapidly by many. But we cannot conform to laws we do not know, nor break them without consequent suffering—nor know them without learning. Hence the uses of Learned Societies, if they have any.

All human investigation is more or less dependant upon mutual aid—aid in corroboration and correction. Discussion hath but two practical issues: (1) Agreement, in identity of opinion; and (2) assumption of infallibility, with its shadow, persecution. Here we are happily freed from all apprehension of the only unwelcome issue. We discuss nothing on which mankind have yet displayed any desire to be deemed infallible. We need not begin, and do not usually end, with disliking or condemning those who differ with us; and we readily effect one of our purposes in even bringing together, and to a better knowledge of each other, a few of those whose thoughts habitually range beyond the narrow circle of their daily cares—promoting, thus, one of the best effects of a common local residence, and giving occasion for what may be reasonably deemed one of the highest forms of good fellowship.

This, however, is not all. We bring them together with a purpose worthy of the occasion—nay of any occasion.

Our primary purpose is to learn, and to aid others, especially those who may come after us, in learning the history of our own locality. And this is by no means so small a matter as to some it might seem. Whether accident or choice cast in our lot with this section of the English community, it has made us partakers in certain special interests. In two ways are we distinguished; and our distinctions have almost as much interest for the world as they have for ourselves. We are apt and busy manipulators of the down of the Cotton-pod, for profit, and for the more perfect clothing of all who have yet learnt to appropriate shirting and gown-pieces.

We are also marked, though less exclusively, for extensive practise of the art of sea-carrying. When the history of this country shall be duly written, some of our social conditions will be noted as prominent and peculiar, and in some respects quite new. In simpler phrase, we are greatly commercial; and the origin and ends of commerce sufficiently denote our place in the National History.

I need scarcely remind you that the history of our nation, as the history of all nations worthy of a history, is a tale of violence slowly displaced by approximations to justice—of misguided knaves turning honest men—first, as finding honesty the best present policy, and then as finding it best for all time—and of fools finding their way to wisdom by paths more devious in act than in retrospect, because, when trodden, seen but a yard or two forward at a time.

First, a fight for a livelihood. Without that man hardly gets beyond companionship with the monkey. To exist, we must either receive or wring from Nature the means of sustenance. And happy they who have to wring hard. To get out of mere savagery, a long step further. Wealth must be accumulated. And wealth will not begin to be till it can be protected—or remain where protection ceases. We begin with the labor of the hand. To that comes skill, inevitably. If two men handle a spade they will handle it differently. Even one will handle it better the tenth day than the first. Then comes the more distinctive labor of the headtill Mind grows more effective, a thousand-fold, than Muscle. How slowly were compassed the earlier stages of this process! What a distance between the staff and the stone, and these combined in the lever; how far apart, in history, the simple lintel and the arch! And why? The first labor was all compelled, and surly; and Nature reveals no secrets to the Yet were this, in truth, unavoidable. We begin with, half-averted eye. and shall never get rid of, a hatred of compulsion—and especially of compulsory labour. Such labour gathers skill but slowly; and except in very low degrees is indeed incapable of it. And this is well. Compulsory labour is slavery; and slavery must always be disagreeable in effect, even to those who have no direct connection with it. But there is only one way of eradicating it. We must make it unprofitable. Now the office of mechanical genius is to render needless all painful muscular exertion; and slowly but surely it is doing its work: doing it under the stimulus of pain:

the only universal and enduring motive among men. Where that motive is not urgent—where labour can be avoided by mere limitation of human wants-where food is plentiful, and clothing and shelter rather luxuries than necessaries, it always is so. Such instances as there are of this are fruitful lessons in Nature's own political economy. Having seen mankind so provided for, we know how readily they settle into the condition of able-bodied out-door paupers, when Providence is perpetual relieving officer. This has never been the state of those who dwelt where we dwell. these islands we have always had the benefit of a large demand for labour, from those excellent but inexorable paymasters the soil and climate. have we had conferred upon us the discipline of needful labour, with its inevitable, though often imperceptible tendency to intellectual adornment. In England, happily, there can be no general idleness. It is forbidden on pain of death. No human being can live a month in the land without gift, exchange, or robbery. But though the evils elsewhere incidental to over easy production have thus been averted, we find in our history traces of all the common evils attendant on the defective distribution of wealtha defect to be cured only by a vast, and as yet unattainable increase of intelligence. We, like the Greek historian, may recall the days when it implied no offence for one gentleman to ask another whether he was a robber-no offence, but rather a kindly interest in his welfare; as though one should say, with greater depth and reality of feeling, "How do you do?" "How do you manage to live in these hard times?"

When our Scandinavian forefathers first fretted these coasts under the banner of the White Horse—admirable emblem of the untamed coursers of the sea, whose dominion they had already won—they came not as outcasts, nor even merely as warriors. They rather followed an occupation of labour and adventure; and followed it for gain. Our own freebooters on the Spanish Main, in the 17th century, were of much the same order. They came to win by plunder what other men had won by toil. And their title, whatever might be thought of it on our Exchange, at three o'clock to-morrow, is hardly yet obsolete. It was not one whit worse than that of the castled chieftains of the Rhine, who long afterwards throve upon toll taken from the Traders up and down that great natural highway; who have wiped out the reputation of felony in the service of romance, and whose descendants now sit upon, or stand about, all the thrones of Europe, and count their ancestry with pride. Nay, barring what right may come

to wrong by sheer lapse of time, their title was quite as good as that of Hanover, at this day, to levy toll on the Trade of the Elbe where that river passes Stade. In truth, the strong hand never has been, and never can be, favourable to commerce, except when under its rule. in the spread of commerce, a pregnant moral blessing. Hence the instinctive antipathy of mercantile men to all takings not sanctioned by exchange; and hence have the weak of this world won an enduring and increasing friend. When Hanover's king was our king, it needed hard winking not to see the injustice of the Stade toll. But with a toll from others on each eyelid we accomplished it. Having lost that, we have lately expressed a determination to pay the toll no longer-no service being rendered for it, and the ancient permission to pass being a thing we have quite grown out of. Not an honourable business; and if it has not cost, and does not yet cost us, more in the respect of Europe than all the toll has ever yielded, there is no safe reliance upon principle, or truth, even in truth itself.

Just payment—being the basis of credit—is now on all hands confessed to be indispensable to commerce; and that is a great point. True, it is but a fragment of sublunary justice; yet it pulls the rest after it. We cannot make clear to men the interest we all have in pecuniary justice, without lifting the veil of some yet higher forms of the principle, and preparing it By our success even in commerce, we surely know that, a wider reign. howsoever it be, we are forwarding purposes higher than our own. Yet it strongly behoves us, as we may, to see why. As our commerce widens, so widens the circle of our work—a work above all commerce. Most plainly may we now see that the very greed of gain, in its blindest and most eager action, holds, and is now known by all the leaders of mankind to hold, its prey, by compliance with, and tacit promotion of a virtue it would never value for itself. And so it is with all the virtues greater or less, yet pressed into the service of commerce. And, thank Heaven, "the soul of "good in things evil" perpetually leavens the rest unto its own nature. As a Nation, we thrive, internally and externally, by the gradual recognition of great truths, and their application, in a higher and higher spirit, to the practical conduct of our affairs. It is the individual that acts, but mankind that are affected. As are the men, so is the nation; and as are the nations, so is the race.

It may seem not much for a commercial age to achieve—to make theft

disgraceful. But no prior agent of civilization has done so much. Ancient History teems with instances of tolerance given to this form of injustice. Take one. I will read you a translation—not perhaps critically exact, but, for the present purpose, truthful—of Horace's ode "Ad Mercuriam." It is the 10th in the first book:—

"Mercury! Atlas' smooth-tongued boy, whose will First trained to speech our wildest, earliest race, And gave their rough-hewn forms with supple skill The gymnast's grace.

Be it my task thy glories to declare, Herald of Jove! inventor of the lyre; Right apt in merry theft to take whate'er Thou may'st desire.

When, as a boy, the oxen stol'n by thee, He urged thee to restore, light-finger'd one! Chiding Apollo turned and laughed to see His quiver gone.

Rich-laden Priam by thy favor led

Amid the foe beneath the encompassed wall,

Through sentries and Thessalian watch-fires sped

Unseen by all.

'Tis thine the unembodied spirits of the blest To guide to bliss, and with thy golden rod To rule the shades; above, below, caressed By every God."

I do not offer this as proving anything. It is not so needed. It simply illustrates, as a thousand other things might do, the absence, among the most refined Romans, of that moral repugnance we always associate with theft.

Now to no men do these thoughts come home more appropriately, or more forcibly, than to us, to whose hands are committed—each in his own sphere—the conduct of the world's, and of our own affairs, in this the busiest centre of commerce the world yet has. Men are always ready, as long as they can obtain listeners, to propagate virtue by precept. But that avails nothing. The only effective teaching is that of example. And Liverpool, with the honor of being the first port on earth, takes also the risk and the responsibility of affording the best known example of commercial conduct. We must expect, in one way or other, to be most copied. For men take their lessons where they find them, not where they might be best sought. The practical conduct of life is being daily learnt in our streets and offices, as well as in our homes, by more thousands than were ever so taught within

a like space, since the first line of history was written. And, being notably a community of runners to and fro' upon the face of the earth, and that most among the least advanced and most teachable of mankind, our teaching by example probably runs through its growth, from bud to seed, far oftener and more widely than we can readily conceive. Great, undoubtedly, is the moral power we already wield. It comes from God. Deus nobis hac otta fecit. It has been earned, or we should not have it. It must be worthily used or we shall not retain it. And worthily to use we must bear in mind that its uses are expansive, and demand of us expanded views of its application. The intellectual and moral position, powers and duties-local, national and world-wide-of the 600,000 souls now making their way from the cradle to the grave on the banks of the Mersey, are very different from those of the 5,000 who thence fished and traded along the neighbouring coasts, and had not even a highway towards London, two centuries ago. The conclusion is obvious—too serious to be otherwise than offensive to the frivolous-too sure and too grand not to absorb and to reward the attention of the earnest and the hopeful. or to those amongst us who shall prove worthy of the trust, are confided, in these passing years, the destinies of a great and growing community. We may come like passing pedlars to our appointed work, intent only on pelf, and our own poor prosperity. We may, if we choose, so continue. But we are under the laws of the Omnipotent; and shall be meted to with our own measure. By these laws alone can we gather a penny, or enjoy a meal, or live till next day to repeat the process. But if some of us did not do more, we should not any of us long do this-and they who do this only, however cleverly they may do it, are very far from being the most fortunate of men, or the most worthy of respect. Days are, that years may be, and years that the race may run its course-not that its individual members may eat, drink, make merry and be gone. even as a mercantile community had we not amongst us many who habitually, however dimly, look a good way beyond and around the business of the passing day, and while using the divine laws to their lower ends, take heed to observe and to serve also their higher, our prospects would not long be otherwise than dismal.

Need I then add that one of the noblest uses of such meetings as the present, is to aid the tendency of the thoughtful amongst us, to look out from our immediate selves and our own concerns—to search out and to

mark for instruction the relations of our locality to the rest of the world—and thus take a higher and better part in that service of God to which we are all alike called: the ennoblement of our own souls, and the elevation of our race.

One use more of such meetings I have yet to advert to. It is the best of all. But all very good things come to us encumbered with a drawback, or a doubt. In this case it is a doubt. So far as our meetings are effective, we may safely assume that they promote the intelligence of those who attend them. Let us then set it down as proved, at least to our own satisfaction, that the Historic Society is in its way, promotive of the intellectual progress of its members. But what then? We all know-or all have heard ofthe lagging curse that follows, and is never far behind, the intelligence that finds no due application. Solomon asked only for wisdom; and many other things were added to him, through this or otherwise. Yet he failed, grossly failed, in duty; and fell, deeply and irretrievably, into wrong-doing. A magnificent example of a common sin: unworthy use of power. Bacon says "Knowledge is Power." It is the most potent, the most easily created and transmitted, the least perishable, and the most variously applicable of all powers. But is it always a benefit to those who possess it—and is it always a benefit to their neighbours? We are very generally persuaded that, all things considered, it is both. But the persuasion is one of faith; and does not yet amount to conviction. For it would seem also, that neither knowledge nor any other form of power is good in itself—that all depends upon its uses; and that the true question is-how does the cultivation of the intellect affect the moral character? Efforts, marked by considerable skill, but yet attended with little success, have been made, to prove that crime is diminished by education. But the problem grappled with in these enquiries, is in some material respects not the same as ours; and no great profit could be here hoped for from the clearest and closest analysis of all that has yet been brought to light by such efforts. There are, however, some considerations, obvious enough to claim attention at the very threshold of the subject, and weighty enough to be worthy of remembrance, whenever our attention may be this way turned.

It is said that commerce lowers the standard of morals, as regards all the generous virtues. And it is true that generosity in the uncivilised state is to a great extent replaced by *philanthropy* in the civilised. It suggests Poor-

Laws, Orphan Schools, and Hospitals. Methods, these, by which our generosity becomes vicarious. We are charitable by deputy. We effect the object—relief of the sick, the poor, and the helpless—perhaps more completely. On the other hand, we lose the best effect of all charitable work: the moral effect upon the doer of good who does his good things in person. But, further, the effect does not satisfy us. With better intelligence we begin to perceive that to relieve misery is not enough. The sufferer has a right to more than our alms. He has a right to such help as we can give to free him altogether from his misery. And we can give him this help only by removing the causes of the misery itself. No matter what these causes may be. It may be that they are not removable. Some think so. But until this be proved we are bound to search for means of removing them. We are bound to give our minds as well as our money, to the duty of charity. The laws which regulate, and under which are produced, all the causes of suffering yet known to society, are, we may safely assume, capable of being themselves known. When known, they will constitute what is called "The Social Science" The building up of this science is the work of the intellect. And as its purpose is essentially to enable us the better to perform our social duties, the conclusion is unavoidable that, whatever may be the observed effect of partial advances, made by individuals, in intelligence, the general effect of every such advance, in commerce or otherwise, must be, by revealing more clearly the harmony of our duty with our interest, to promote, and that on the only sure basis, a perfect development of our moral nature.

Let us hope—but not as those who hope only—that the Historic Society may, some day, worthily take a distinguished place among the learned societies which have comprehended and compassed this, the noblest use to which human institutions can be devoted.

PROCEEDINGS. ELEVENTH SESSION, 1858-59.

ANNUAL GENERAL MEETING.

St. George's Hall, 18th October, 1858.

Major-General The Hon. Sir EDWARD CUST, President, in the Chair.

The Secretary read the following

REPORT.

In recording the history of the Society during the Tenth year of its existence, the Council have the pleasure of announcing that its previous career of uninterrupted success has continued, and that it now numbers about 500 ordinary members. The accession of the late Photographic Society has contributed to this result; and the Council believe that, while thus increasing its numerical strength, the importance and usefulness of the Society as a scientific body will also be augmented by the consequent addition of a new subject of research.

The Council have to report the usual per centage of diminution by resignation and death. Amongst the vacancies arising from the latter cause they regret having to record the name of Mr. Dawson Turner, who had been an honorary member since the 6th of February, 1851.

The annual volume is now about to be issued. Its publication has again been delayed beyond the usual period; but this delay has principally arisen from the variety and extent of its contents, and the consequently increased labour involved in the printing. It will be found to contain a series of papers to which the Council refer with satisfaction, as indicating by their character and execution the resources of the Society in its various sections. The concluding paper, by Mr. George Scharf, jun., is profusely illustrated from woodcuts kindly lent for the purpose by their respective owners.

Hitherto the volume has been issued to the members on conditions which have been found injurious to the interests of the society; but at a special general meeting held on the 4th of March last, Law 16, which regulates its distribution, was altered so as to restrict the delivery to those only whose subscriptions for the current session are paid up. The law, as amended, will be found in the appendix to volume X.; which also contains a brief record of the Annual Excursion, and a notice of the proceedings at the meeting held in the Museum of British and Foreign Antiquities, on the kind invitation of the proprietor, Mr. Mayer.

During the last Session the number of articles added to the Museum has been comparatively small; but the additions to the Library have kept pace with the expansion of the Society in other respects, and the Council have the gratification of recording amongst the new contributions a series of publications of the Historic Society of Lower Saxony, and another of the State Historical Society of Wisconsin, U.S.A. Owing principally to this increase, they have found it necessary to exchange the room formerly rented by the Society at 57, Ranelagh Street, for one more commodious in the same building, where the books, &c., are now arranged. The room will be open every evening of meeting from five till within a few minutes of seven, and members who cannot attend may obtain books by a written application to the Assistant Secretary.

The Treasurer's balance sheet shows the receipts for the year to have been £377 1s., which sum, added to the balance from last year, amounting to £14 5s. 11d., shows a gross total of £391 6s. 11d. to the credit of the Society. The entire payments amount

to £381 1s. 9d., leaving in hand a balance of £10 5s. 2d. There have been no extra charges of importance, except those arising from the increased cost of the volume, owing to its greater bulk and the number of illustrations. The arrears are large, but the Council have reason to hope that the labours of a Finance Committee, recently appointed, will have the effect of diminishing them.

Agreeably to the laws, the names of six gentlemen are submitted for appointment to the various sections, in lieu of those who retire from the Council.

It was then moved by the Rev. Dr. Hume, seconded by P. R. M'Quie, Esq., and resolved unanimously:—

That the Report now read be adopted, and printed and circulated with the Proceedings of the Society.

The following Statement of Accounts by the Treasurer having been read,

It was moved by P. R. M'Quie, Esq., seconded by Joseph Mayer, Esq., and resolved unanimously:—

That the Treasurer's Statement of Accounts be passed, and printed and circulated with the Proceedings of the Society.

THE HISTORIC SOCIETY OF LANCASHIRE AND CHESHIRE in Account with Thomas Avison, Treasurer.

| THE VOLUMES:- | £ s. d. | £ s. d. |
|---|-----------|--|
| Vol. ix.—T. Brakell, deli- | | Balance from last Account 14 5 11 Entrance fees |
| very & postage £7 13 | | Entrance fees |
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| H. Shimmin, bookbinding 10 12 | 1 | |
| | 0 | |
| Advertising, newspapers and insurance 6 4 | 8 | |
| Commission, making up | 0 | |
| accounts &c 16 10 | 4 | |
| Messages, postages, parcels | | |
| and miscellaneous 34 10 | | |
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Examined by

Dr.

PETER R. M'QUIE, AUDITORS.

(E. and O. E.)

Liverpool, 18th October, 1858.

THOMAS AVISON.

Cr.

It was moved by T. Comber, Esq., seconded by J. R. Hughes, Esq., and resolved unanimously:—

That the thanks of the Society be given to the Officers and Sectional Members of the Council, for their services during the past session.

It was moved by the Rev. Dr. Hume, seconded by D. Buxton, Esq., and resolved unanimously:—

That the thanks of the Society be given to the Lord Bishop of Chester, Meadows Frost, Esq., and the Members of the Chester Archæological Society, for their kind and hospitable reception of the Members of the Society on the occasion of the late Annual Excursion; and to Joseph Mayer, Esq., for his reception of the Society at his Museum of British and Foreign Antiquities, on the 6th of April last.

It was moved by T. Sansom, Esq., seconded by W. Burke, Esq., and resolved unanimously:

That the thanks of the Society be given to the donors of illustrations for the annual volume.

A ballot having been taken for the Officers and Sectional Members of Council, the result was announced from the chair. (See page vi.)

Thanks were conveyed by acclamation to the President, for his services during the evening, on the motion of D. Buxton, Esq., seconded by the Rev. Dr. Hume.

4th November, 1858. ARCHÆOLOGICAL SECTION.

WM. Brown, Esq., M.P., V.P., in the Chair.

The following gentlemen were duly elected members of the Society:-

Colin A. Drysdale, 73, Falkner Street. Edward Francis Evans, Church Road, Stanley.

The following donations were presented:—

From the Society of Antiquaries, London. Archæologia; or, Miscellaneous Tracts relating to Antiquity, vol. xxxvii, part 2. Proceedings, No. 47. List of Members, 1858.

From C. Roach Smith, F.S.A. Notice Biographique Sur A. Hermand. Freeman's Llandaff Cathedral.

By Exchange. (Mr. Herdman.) Ancient Liverpool, (N. S.,) parts xi and xii.

From the Rev. Dr. Hume. Four Maps of Liverpool, coloured to represent its Moral and Social aspect, the districts of pauperism, crime, &c.,—its Ecclesiastical and Municipal districts, and its progress in extent and population from 1650 to 1725, 1765, 1801, 1811, 1821, 1831, 1841 and 1851 respectively.*

The following objects of interest were exhibited:—

By A. Craig Gibson, Esq. A collection of Mason's Marks, from Furness Abbey, by Jos. Fletcher and J. Dees.

By Mr. W. Henderson. A copy of the Carlisle Journal, dated 26th December, 1812; remarkable for the number of highway robberies recorded as occurring in one week.

^{*} See Proceedings, vol. x, p. 354.

By Mr. Adam Burgess. An Electric Telegraph as now in general use. Mr. Burgess conveyed various messages at the dictation of members, and explained the mode of working; adding numerous details of plans, proposed or in operation, for further improving the instrument.

The following Paper was read:-

ON THE ARMING OF LEVIES IN THE HUNDRED OF WIRRAL, IN THE COUNTY OF CHESTER, AND THE INTRODUCTION OF SMALL FIRE-ARMS AS WEAPONS OF WAR IN PLACE OF BOWS AND ARROWS,* by Joseph Mayer, F.S.A., &c.

11th November, 1858. LITERARY SECTION.

DAVID BUXTON, F.R.S.L., in the Chair.

The following donations were presented:—

From the Society. Transactions of the Liverpool Chemists' Association. Session 1857-58.

From the Society. Proceedings of the Literary and Philosophical Society of Liverpool. Session 1857-58.

From the Countess of Sefton. Copy of a Memorial to the late Earl, her husband, erected in Sefton Church.

From James Kendrick, M.D. Various Tracts and Prints, illustrative of the subject of the Paper for the evening.

From the Chairman. Observations on the Article "Deaf and Dumb," in the eighth edition of the Encyclopedia Britannica, by the donor.

From the Author. The History of Taxation in England, with an Account of the Rise and Progress of the National Debt, by Wm. Tayler, Esq., Barrister-at-Law.

From the Author. The North-West Passage, and the Plans for the Search for Sir John Franklin, by John Brown, F.R.G.S.

The following Paper was read:-

A HISTORICAL SKETCH OF WARRINGTON ACADEMY, + by Henry Arthur Bright, B.A.

18th November, 1858. SCIENTIFIC SECTION.

JOHN HARTNUP, F.R.A.S., in the Chair.

The following donations were presented:—

From the Society. Journal of the Geological Society of Dublin, vol. viii, part 1.

From the Society. Proceedings of the Royal Geographical Society, vol. ii, Nos. 3, 4 and 5.

From the Society. Proceedings of the Royal Society of Edinburgh. Session 1857-58, No. 48.

From the Author. Papers read to the Botanical Society of Edinburgh, by George Lawson, Ph. D.

^{*} Transactions, p. 83.

- From the Author. List of Phænogamous Plants and Ferns of Western Penwith, by James B. Montgomery, M.D.
- From the Mersey Docks and Harbour Board, through the Chairman. Tables and Charts, shewing the direction and strength of the wind at the Liverpool Observatory, 1852-57.

The following objects of interest were exhibited:-

- By Mr. J. Newton. Photographs of Oil Paintings in the Manchester Art-Treasures' Exhibition, by Caldesi and Montecchi. A variety of other Photographs.
- By Mr. Chadburn. A Photograph of Leeds Town Hall, shewing a remarkable stereoscopic effect arising from the angle at which the impression was taken, and the distribution of light.
- By Mr. Greenwood. Various Photographs.
- By Mr. Keith. An Improved Chamber, for use in Landscape Photography.
- By Mr. Shadbolt. Photographs illustrative of the subject of his Paper.

The following Paper was read:-

SUGGESTIONS AS TO THE DIRECTION IN WHICH WE MAY WORK WITH A VIEW TO IMPROVEMENT IN LANDSCAPE PHOTOGRAPHY, by George Shadbolt, Esq.

25th November, 1858. MISCELLANEOUS MEETING.

Rev. HENRY H. HIGGINS, M.A., in the Chair.

The following donations were presented:

From the Society. Proceedings of the Royal Society, vol. ix, Nos. 31 and 32.

From the Society. Journal of the Royal Dublin Society, vol. i, 1856-57.

From the Archæological Institute. The Archæological Journal, Nos. 57 and 58.

From Mr. J. D. Mercier. A curious old MS., supposed to belong to the 15th century.

The following objects of interest were exhibited:-

- By the Committee of the Free Public Library, through Mr. Dalton, Librarian. Various Books of Prints, recently added to the Free Public Library, including some very fine specimens of Lithography.
- By the Rev. Dr. Hume. Two Casts of Seals in gutta percha, viz., (1) the Common Seal of the Grammar School of Sevenoaks, Kent, and (2) the old Borough Seal of Dartmouth.
- By Mr. T. Sansom. Several Micro-Photographs. A Portrait of the Pretender James Stuart, from an engraving on gold, now in the British Museum; only a few copies of which have been printed.
- By Mr. H. Ecroyd Smith. Antiquities recently found at Hoylake.
- By Mr. T. Dawson. An Original Sketch, made on board one of the small vessels sent from the French Fleet to find a fit place for landing a force for the invasion of Ireland, and found on board of her when taken by the Pallas, Capt. Curzon, 1796.
- By the Rev. Dr. Hume. Two Coloured Drawings of a Painted Window in Middleton Church, Lancashire.

The following Papers were read:-

Remarks on a Painted Window in Middleton Church, Lancashire, by the $Rev.\ A.\ Hume,\ D.C.L.;$ and Results of some Experiments on Photographic Glass, by $Mr.\ J.\ R.\ Berry.$

2nd December, 1858. ARCHÆOLOGICAL SECTION.

JOHN ROBSON, M.D., in the Chair.

The following gentlemen were duly elected members of the Society:-

George Artingstall, Warrington.
Rev. Joseph Clarke, M.A., R.D., Stretford, Manchester.
Malcolm Greame, Colonial Buildings, Dale Street.
Robert Jones, 7, Batchelor Street.
Captain Kirkes, D.L.O., Moorlands, Lancaster.
Rev. R. Leah, B.A., Liverpool.
James Lee, Berkeley Street.

The following donations were presented:-

From the Society. Report and Communications to the Cambridge Antiquarian Society, No. viii.

From the Society. Proceedings and Papers of the Kilkenny and S. E. of Ireland Archæological Society, vol. ii, Nos. 14, 15 and 16.

From the Editor. Révue de l'Art Chrétien, No. 5, Mai, 1858, dirigé par M. L'Abbé Corblet.

The following objects of interest were exhibited:—

By Thomas Avison, F.S.A. An Original Assessment of the Town of Liverpool for the Land-Tax, 1705. An Original Assessment of the Town of Liverpool for the Poor-Rate, 1708.

By Mr. Forrest. Specimens of Ancient Illuminated Glass, in various stages of corrosion, and shewing numerous styles of ornamentation.

The following Paper was read:-

Geographical Terms, considered as Tending to Enrich the English Language,* by the $Rev.\ A.\ Hume,\ D.C.L.$

9th December, 1858. LITERARY SECTION.

A. CRAIG GIBSON, Esq., in the Chair.

The following donations were presented:—

From the Society. Journal of the Statistical Society, vol. xxv, parts 1, 2 and 3. List of Fellows, 1858-59.

From the Society. Journal of the Society of Arts, Nos. 286 to 307.

^{*} Transactions, p. 133.

The following objects of interest were exhibited:-

By Joseph Mayer, F.S.A. Surveys of the Roman Wall and other Remains in the North of England, a presentation copy from the Duke of Northumberland, by whose direction the surveys were made.

By Mr. J. R. Jago. A series of Engravings from the Florentine Gallery.

By Mr. Newton. A volume of an ancient illustrated German Bible.

By Mr. Chadburn. A drawing-room Stereoscope, adapted for two spectators.

The following Paper was read:-

Boz and Dickens compared, by D. Buxton, F.R.S.L.

16th December, 1858. SCIENTIFIC SECTION.

CHRISTOPHER BELL, Esq., in the Chair.

The following gentlemen were duly elected members of the Society:-

Leopold Promoli Hausburg, London. Rev. A. Tattersall, M.A., Walton-on-the-Hill. Edward S. Tuton, 42, Lime Street.

The following donations were presented:—

From the Society. Proceedings of the Royal Geographical Society, vol. ii, No. 6.

From the Society. Quarterly Journal of the Geological Society, vol. xiv, parts 3 and 4.

From the Society. Memoirs and Proceedings of the Literary and Philosophical Society of Manchester, 1857-58.

From J. T. Towson, F.R.G.S. Four coloured Views, viz:—St. James's Palace, 1741; Ranelagh House, 1745; S.E. view of London, 1746, and Vauxhall Garden, about the same date.

The following objects of interest were exhibited:—.

By the Chairman. An Album of Photographs.

By T. Sansom, A.L.S. A specimen of the Chameleo vulgaris, dead.

By J. T. Towson, F.R.G.S. A living specimen of the same.

By the Rev. John Sansom, B.A. The Egg of a Fowl, found at Buslingthorpe, Lincolnshire; it was very small, being about one inch in length, and the shell was continued in the shape of a tube about an eighth of an inch in diameter and three inches long.

The following Paper was read:-

ON THE DIATOMACEÆ OF THE NEIGHBOURHOOD OF LIVERPOOL,* by Thomas Comber, Esq.

^{*} Transactions, p. 71.

6th January, 1859. ARCHÆOLOGICAL SECTION.

WM. Brown, Esq., M.P., V.P., in the Chair.

Mr. Richard Hunt, 9, Castle Street, was duly elected a member of the Society.

The following donations were presented:—

- From the Society. Proceedings of the Society of Antiquaries of Scotland, vol. ii, part 2.
- From the Society. Original Papers published by the Norfolk and Norwich Archæological Society, vol. x, part 3.
- From the Author. Some Notices of the Family of Newton, of Newton and Pownall Hall. Roll of a Subsidy levied 13th Henry IV., so far as relates to the County of Sussex, by T. Herbert Noyes, Jun., B.A.
- From Mr. A. Shute. Pen and ink Sketch of the ancient Cross in Mawgan Church-yard, Cornwall, taken by the donor, 1858.
- From Mr. John Dixon, Whitehaven, through Mr. Hugh Shimmin. An engraved copy of the Inscription on the Pillar, or Cross, at St. Bride's, Beckermont, Cumberland.
- From the Author. The Queen's English; a Paper read before the Philomathic Society. An enquiry into the causes of Deaf-dumbness, congenital and acquired, by D. Buxton, F.R.S.L.

The following objects of interest were exhibited:-

- By the Chairman. A collection of Photographic Views, principally taken in Italy and Honduras. An Instrument for taking measurements to the Too part of an inch.
- By the Translator. A magnificent illuminated MS. translation of the Hymn to Aphrodite, from the Greek of Homer, by L. P. Hausburg, 1858.
- By Mr. A. Shute. A Panel taken from a Church in Sebastopol, containing illustrations of sacred subjects, in compartments.
- By Mr. H. Ecroyd Smith. A photograph of a Roman Tessellated Pavement, taken by Mr. John Pouncy, of Dorchester, by his new process of carbon-printing, said to render colours indestructible. Fragments of a glazed Earthen Vessel, probably used as a receptacle for water, found near the "Guinea Gap," after a recent landslip on the Egremont shore of the Mersey.
- By Mr. Mayer. A group of Flowers, one of the earliest specimens of porcelain made in England, from the manufactory of Richard Champion, in the Castle Green, Bristol. A British Torque and Armlet, found in Suffolk, weighing nearly eight ounces, of virgin gold. A Knife and Fork with carved amber handles, of the time of Elizabeth. An early specimen of a Reliquary in brass, having on one side the name "Madoc." An electrotype Plaque, of Chinese carving, beautifully executed. An ivory Carving of a Knight, richly clad in armour, with shield bearing a griffin segreant, the work of the 15th century. A MS. book of Maps of various parts of the world, with illustrations consisting of galleys, ships &c., of the beginning of the 16th century. An archæological Walking Stick, presented to Mr. Mayer by Mr. F. Bööck; it is made from the hide of a rhinoceros; the head, encased in glass, is of silver, partly gilt, and is hexagonal, with niches on each side containing figures which represent Egypt, Assyria, Etruria, Greece, Rome and Albion, which names are inscribed on the pedestals in the characters of the respective peoples. There are also scrolls, masks and other ornaments of mediæval times.

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The following Paper was read:-

ON HOME EDUCATION, PART I., by Mr. Hugh Shimmin.

13th January, 1859. LITERARY SECTION.

JAMES KENDRICK, M.D., in the Chair.

The following donations were presented:-

From the Society. Journal of the Society of Arts, Nos. 308 to 318.

From the Society. Journal of the Statistical Society, vol. xxi, part 4.

From the Author. Condition of Liverpool, religious and social; including notices of the state of Education, Morals, Pauperism and Crime, by the Rev. A. Hume, D.C.L., LL.D., F.S.A., Incumbent of the new Parish of Vauxhall, Liverpool.

From T. T. Wilkinson, F.R.A.S. The Lady's and Gentleman's Diary, for 1859. Specimens of the Masonry of the Roman Wall at Camp-field, Manchester.

From M. de Perthes. L'Abbevillois, and Le Pilote de la Somme, French Newspapers, for the 4th instant.

From A. Wellington Hart, Esq., New York, through Joseph Mayer, Esq. Fourteen Notes for various sums; being Specimens of the Continental Currency used in the North American Colonies before and about the declaration of independence.

The following objects of interest were exhibited:

By the Chairman. Drawing of a curious Stone Implement weighing 25½ lbs., dated 1607, in his possession at Warrington, supposed to have been used in the manufacture of Felt.

By Mr. Blackmore. A small Figure of Hermaphroditus, in gold; probably Etruscan.

By T. T. Wilkinson, F.R.A.S. A Latin Charm, used by a Lancashire Farmer for the protection of himself and cattle from witchcraft.

The following Papers were read:-

ON THE POPULATION OF LANCASHIRE AND CHESHIRE, DURING THE FIFTY YEARS 1801-51, Part III,* by J. T. Danson, F.S.S., and T. A. Welton, F.S.S.

ON THE POPULAR CUSTOMS AND SUPERSTITIONS OF LANCASHIRE, PART I,+ by T. T. Wilkinson, F.R.A.S.

20th January, 1859. SCIENTIFIC SECTION.

WM. Brown, Esq., M.P., V.P., in the Chair.

The following donations were presented:-

From Mr. H. W. Harrison. A series of Play Bills of the Theatre Royal, Liverpool, for 1822.

^{*} Transactions, p. 31.

From the Society. Collections of the Surrey Archæological Society, vol. i, part 2.

From the Royal Irish Academy. Catalogue of the Antiquities in the Museum of the Royal Irish Academy.

From the Editor. The Archæological Mine, parts 40 and 41, edited by A. J. Dunkin, Esq.

From C. Corey, Esq. A series of Medallions of Napoleon I and his era, by Andrieu.

The following Paper was read:-

ON THE GREAT COMET OF 1858,* by John Hartnup, F.R.A.S., and J. T. Towson, F.R.G.S.

3rd February, 1859. ARCHÆOLOGICAL SECTION.

REV. A. RAMSAY, M.A., in the Chair.

Mr. George Leslie, 133, Upper Parliament Street, was duly elected a member of the Society.

The following donations were presented:-

From the Society. Journal of the Architectural, Archæological and Historic Society of Chester, 1858.

From the Cambridge Antiquarian Society. History of the Parish of Waterbeach, in the County of Cambridge, by W. K. Clay, B.D., Vicar.

From the Society. Bulletin de la Société Archéologique de l'Orléanais, No. 30.

The following Paper was read:-

ON THE POEMS OF OISIN,+ by Professor Connellan, of the Queen's University, Ireland.

10th February, 1859. LITERARY SECTION.

EDWARD HEATH, Esq., V.P., in the Chair.

The following gentlemen were duly elected members of the Society :-

Henry Peter Meaden, Burnley. John Mewburn, 30, Richmond terrace.

The following donations were presented:—

From the Society. Transactions of the Cambridge Philosophical Society, vol. x, part 1.

From the Society of Arts. Journal of the Society, Nos. 319 to 324. The Exhibition of 1861: why it should be; what it should be; where it should be.

From the Author. Town Life, by the author of "Liverpool Life."

^{*} Transactions p. 199. + Transactions, p. 97.

- From the Author. Liverpool, Past and Present, in relation to Sanitary operations, by James Newlands, F.R.S.S.A., C.E., Borough Engineer of Liverpool.
- From Mr. Newlands. Sanitary Legislation, with Illustrations from experience in Liverpool, by W. T. Mc.Gowen, Solicitor; principal Assistant to the Town Clerk of Liverpool (sanitary department.)

The following objects of interest were exhibited:-

- By Mr. Barnes. A black-letter copy (without date,) of Reginald Scot's "Dis-"coverie of Witchcraft."
- By the Rev. Dr. Hume. A bronze Figure of androgynous appearance, from the neighbourhood of Rome. Some fibres of the Hollyhock Plant, greatly resembling flax or hemp.
- By Mr. H. Johnson. An early copy of Chamberlayne's "Angliæ Notitiæ."

The following Paper was read:-

Home Education of the Industrial Classes—How it may be Improved, by $Mr.\ Hugh\ Shimmin.$

17th February, 1859. SCIENTIFIC SECTION.

JAMES KENDRICK, M.D., in the Chair.

The following donations were presented:—

From the Society. Journal of the Kilkenny and S.E. of Ireland Archæological Society, (New Series,) vol. ii, Nos. 17 and 18.

From the Archæological Institute. The Archæological Journal, No. 59.

From the Society. Proceedings of the Philosophical Society of Glasgow, vol. iv., part 1.

The following objects of interest were exhibited:-

- By the Rev. Dr. Hume. A Nugget of quartz and gold, from the auriferous reef lately discovered near Yass, in New South Wales.
- By the Chairman. A curious Implement in Stone, inscribed "TS 1607," weighing 25½ lbs. It is furnished with a handle like the common flat-iron, and was formerly used in the smoothing and glossing of woollen cloths. Fragments of three earthen vessels of early date; one had originally two handles, and had been used as a drinking cup or tyg; the other two are conjectured to be portions of domestic censers or fuming pots for burning incense, such as were usually found in the barbers' shops of the time of Shakspere, who makes Petruchio complain to his wife Katharine that she has as many (eyelot) holes in her sleeve as a barber's censer.
- By Mr. Mayer, through Mr. T. Sansom. A Microscope, made by George Lindsay, in 1742. The framework is of solid silver, and great ingenuity is displayed in its construction. The stage, on which the object to be viewed is placed, is so contrived that a slide of any thickness can be held firmly in position, and the adjustment of the focus is attained by a very peculiar motion of the stage, given by a lever in which a slot is cut, so contrived that its entire length is twice passed through, in the course of adjustment from a high to a low power, by the pin which holds the stage. It has six object glasses placed in silver slides of three each, made to travel in a groove, and one of low power,

separately mounted, and furnished with a Lieberkuhn; there is also a Lieberkuhn for the other glasses, and, as a guide in adjusting the focus, there is a scale, with a pointer on the side of the microscope. The illumination is by a concave mirror similar to that used at the present day.

The following Paper was read:-

ON THE EARLY CHARTERS OF ST. WERBURG'S IN CHESTER,* by John Robson, M.D.

3rd March, 1859. ARCHÆOLOGICAL SECTION.

WM. BURKE, Esq., in the Chair.

The following donations were presented:-

From the Society. Journal of the Royal Dublin Society, Nos. 9, 10 and 11, 1858.

From the Society. Proceedings of the Geological and Polytechnic Society of the West Riding of Yorkshire, 1857-58.

From the Leeds Philosophical and Literary Society. Annual Report for 1857-58. China and its Trade, by John Crawfurd, F.R.S. Sensorial Vision, by Sir J. F. W. Herschel, Bart, K.H., F.R.S. &c.

From M. de Perthes. "L'Abbevillois," French Newspaper for the 18th February, 1859.

From Mr. W. Every. A series of ninety-seven Liverpool Play Bills, from July, 1821, to the end of 1823.

The following Paper was read:-

On the Organisation of the Chameleon, including a Correction of certain Errors relating thereto, by J. T. Towson, F.R.G.S.

10th March, 1859. LITERARY SECTION.

JAMES KENDRICK, M.D., in the Chair.

The following donations were presented:—

From the Society. Proceedings of the Royal Society, vol. ix, No. 33.

From the Society. Journal of the Statistical Society, vol. xxii, part 1.

From the Society. Quarterly Journal of the Geological Society, vol. xv, part 1.

The following objects of interest were exhibited:--

By Mr. Wallace Fyfe, through Mr. H. Ecroyd Smith. Roman articles in pottery and painted mortar. An object composed of a bronze ring attached to plates of zinc, for enclosing a large cork, part of which remains; supposed to be the stopper of a Roman amphora.

By Mr. Tyndall, through Mr. H. Ecroyd Smith. An extensive collection of imple-

^{*}Transactions, p. 187.

† The publication of this Paper is delayed, to enable the Author to add the results of observations still in progress.

ments of the Stone Period, found during the last twenty or thirty years in the East Riding of Yorkshire, consisting of several celts and stone hammers and a large number of arrow-heads from the rudely-edged splinter to the artistically formed barb, a variety of javelin and spear-heads, knives, saws and sling-stones, of various sizes and shapes.

The following Paper was read: -

RUNIC INSCRIPTIONS: ANGLO-SAXON AND SCANDINAVIAN,* by A. Craig Gibson, Esq.

17th March, 1859. SCIENTIFIC SECTION.

THOMAS SANSOM, A.L.S., in the Chair.

The following donations were presented:-

From the Society. Proceedings of the Royal Geographical Society, vol. iii, No. 1.

From the Author. Diary of a Month's Tour in the South of France, during the Autumn of 1858, by John Adkins Barton.

The following object of interest was exhibited:-

By Mr. James Boardman. His Passport, bearing the official visé of the Emperor Napoleon I., dated 21st February, 1815, a few days before he left Elba, for Paris.

The following Paper was read:-

On the Magnetic Condition of Iron Ships, by J. T. Towson, F.R.G.S.

14th April, 1859. MISCELLANEOUS MEETING.

WM. BURKE, Esq., in the Chair.

Mr. Leonard Clement, of Trinity Terrace, Burnley, was duly elected a member of the Society.

The following donations were presented:—

From G. Charles, Esq., through the Rev. D. Thom, D.D. A copy of the Armorial Bearings on the ceiling of Tarporley Church.

From the Author. Voyage en Espagne et en Algérie en 1855, par M. Boucher de Perthes.

From the Society. Bulletin de la Société Française de Photographie, No. 4, Avril, 1859.

From C. Roach Smith, F.S.A. Philosophy of Voice and Speech, by James Hunt, Ph.D. Report of the Speeches at the Special Meeting of the British Archæological Association, 1845, by A. J. Dunkin, Esq.

^{*} Transactions, p. 111.

. The following objects of interest were exhibited:—

By Joseph Mayer, F.S.A. A bronze British shield found in the Thames during the excavations made for the foundation of Battersea Bridge. An iron Knife, of the type called Sceaux, of Anglo-Saxon make. An early enamelled Cross, having a figure of Christ nailed on the four arms. A wooden pouncet-box, carved all over with figures of boys and fruits and foliage. A bronze figure of a stag, supposed to have been used in rites belonging to the worship of Diana, found on the estate of Mr. Whittal, of Smyrna, formerly of Liverpool. Two pieces of a Roman mortarium, made of clay and covered, whilst half dry, with particles of pounded silex or crystal, which, on being burned in the fire, became fixed on the surface, and served the domestic purpose of triturating food; two tiles of a lozenge form, made of micaceous sandstone, used for covering the roofs of buildings; and a large fragment of a brick of fine red clay. These last described objects were found at Wroxeter, the Roman City of Urioconium, about five miles from Shrewsbury, the ruins of which cover an area nearly three miles in circumference.

By the Rev. Dr. Hume. A copy of depositions taken at Chester, on the fifth day of January, in the sixth year of King Edward VI., concerning a place called the King's Wood. Histories of the families of Neville, Drummond and Dunbar, Hume and Dundas.

The following Paper was read:-

On the Uses of Learned Societies: and in particular of the Historic Society,* by $J.\ T.\ Danson,\ F.S.S.$

5th May, 1859. ARCHÆOLOGICAL SECTION.

Joseph Mayer, F.S.A., in the Chair.

The following donations were presented:-

From the Archæological Institute. The Archæological Journal, No. 60.

From the Society of Antiquaries of Newcastle-upon-Tyne. Archæologia Æliana, (New Series,) parts 1 to 12.

From the Society. Transactions of the London and Middlesex Archæological Society, vol. 1, part 2.

From the Society. Original Papers published under the direction of the Committee of the Norfolk and Norwich Archæological Society, vol. v, part 4.

The following objects of interest were exhibited:-

By the Rev. Dr. Hume. A series of drawings from objects found at Great Meols, near Hoylake, so early as 1817. They are now in the possession of P. B. Ainslie, Esq., of the Mount, Guildford, who possesses numerous other objects of interest. Among them was a beautiful gold ring, apparently for the thumb, and a graceful mediæval silver ring; numerous brooches, and several Roman fibulæ enamelled.—Two gutta percha impressions of ancient seals, one of them exhibiting, in the costume of the principal figure, points of interest.

By Mr. H. Ecroyd Smith.—A number of objects, found since the commencement of the present year, upon the Cheshire sea-shore, westward of Leasowe Castle. They represent various periods of our history and very diverse uses, the fol-

lowing being among the most interesting specimens. A silver penny of Canute the Great, A.D. 1015-1036, in the finest state of preservation; the obverse bearing the filleted head and bust of Canute, with his sceptre in front, inscribed "Cnut rex"; on the reverse a voided cross, with "Spellem. Mon. "Pin.", shewing that the coin had been struck at Winchester: it is the fifth piece of this monarch which has been obtained since similar antiquites have been preserved. A ring-brooch in silver, of about the same period; it is a specimen of, what is by no means common, semi-ornamentation, being chased on only one side, with an elegant spiral design. A massive ball of red granite, five inches in diameter, which would appear to have been either a projectile from the catapulta of the Ancients or a bullet for our early English ordnance.

The Rev. Dr. Hume described an ancient book, the genuineness of which was quite unquestionable, which he believed would enable him to compile a Liverpool Directory for the year 1708; and considering that the earliest "Gore's Directory" was for the year 1766, it would be seen that it would be anticipated by more than half a century. The book shewed the levying of three distinct rates in two sections of the town: it gave the names and occupations of the residents or occupiers in the several streets, the value of their premises &c., with much other information respecting the early condition of Liverpool.

The following Paper was read:-

A SKETCH OF THE ORIGIN AND EARLY HISTORY OF THE LIVERPOOL BLUE COAT HOSPITAL,"* by Mr. John R. Hughes.

12th May, 1859. LITERARY SECTION.

P. R. Mc.Quie, Esq., in the Chair.

The following donations were presented:-

From the Author. Letters on coating with manure the seed of wheat and other cereals before sowing; by John Ronald, merchant, Glasgow.

From the Society. Proceedings of the Royal Society, vol. ix, No. 34.

From the Archæological Institute. The Archæological Journal, No. 61.

From the Society. Journal of the Manchester and Liverpool Agricultural Society, for 1859.

The following Paper was read:-

On the Crusades as affecting Civilisation, by D. Buxton, F.R.S.L.

19th May, 1859. SCIENTIFIC SECTION.

THOMAS SANSOM, A.L.S., in the Chair.

M. L'Abbé Cochet, of Dieppe, Inspector of Antiquities and Monuments in Normandy, was duly elected an honorary member of the Society.

The names of the following gentlemen were erased from the roll of members under the operation of Law XII:—

Messrs. W. Allport, T. Baines, James Bedford, Ph.D., T. Croxton, W. Ellis, P. E. Eyton, Rev. H. Hampton, M.A., E. Hindley, T. L. Hodson and A. H. Wylie.

The following donations were presented:-

From the Society. Transactions of the Ossianic Society, vol. iv.

From the Society. Proceedings of the Royal Geographical Society, vol. xv, part 2, No. 58.

From the Society. Journal of the Society of Arts, Nos. 331 to 338.

From the Royal Institution of Liverpool. Report for 1858-59.

From the Society of Antiquaries of Newcastle-upon-Tyne. Archæologia Æliana, part 13, (New Series.)

From the Society. Mémoires de la Société des Antiquaires de Normandie, vol. ii, and vol. iii, part 1.

From Mr. Moss. A curious specimen of a Boulder, about eight inches in diameter, found in a large flag stone.

The following objects of interest were exhibited:-

By Mr. Woodward, of Baltimore, U.S.A. A Solar Camera of his invention, for taking enlarged copies of photographs and other pictures or prints; together with specimens, consisting of portraits, landscapes &c., taken by the instrument.

By Mr. A. Shute. Two Impressions of Seals of the cathedral church of Christiania. A terra-cotta Lamp, found among the ruins of Carthage.

The following Papers were read:-

ON THE VARIOUS DRY PROCESSES IN PHOTOGRAPHY, by Mr. W. Keith.

OUTLINE OF THE SEA COAST OF CHESHIRE,* by the Rev. A. Hume, D.C.L., &c.

^{*} Transactions, p. 219.

APPENDIX.

2nd July, 1859. SPECIAL GENERAL MEETING.

EXCURSION TO RIVINGTON PIKE, &c.

The Annual Excursion of the Members and Friends of the Society took place on the above date. On arriving at the Bolton Railway Station, the party, which numbered about sixty persons, was met by the Mayor of the town, W. Makant, Esq., the Rev. H. Powell, Rector, the Rev. the Vicar of Deane, Mr. Matthew Dawes, Mr. T. Holden, Mr. R. Heywood, and Mr. Gilbert J. French. They first proceeded to the residence of the last-named gentleman, where they partook of luncheon and inspected a number of antiquarian remains and other curiosities. They then visited the Parish Church—the remarkable features of which were pointed out by the rector—the site of the execution of the Earl of Derby, in 1651, the Free Library and the beautiful enclosed Market. The excursion party then drove to the Liverpool Corporation Water Works, and explored the extensive Reservoirs of Rivington and Anglezark, with their Filtering Beds and other accessory works, under the guidance of the resident officers of the Liverpool Town Council; and on the invitation of Peter Martin, Esq., accompanied him over the beautiful grounds of his residence, "The Street."

At four o'clock, the party assembled for dinner at the Blackamoor's Head Inn, on the banks of the Rivington Reservoir. William Brown, Esq., V.P., presided, and various addresses, having reference to the pursuits and the prosperity of the Society, were delivered by the Chairman, the Rev. Dr. Hume, Honorary Secretary, and other gentlemen. After spending a day of much pleasure and interest, the party returned home by way of Bolton.

The enjoyment of the excursion was much heightened by the hospitable kindness of Mr. French, and the polite attentions of the other gentlemen of Bolton already named, during their visit to the objects of local interest in that town, and by the assistance in examining the Waterworks at Rivington, rendered at the instance of the Town Council of Liverpool by their agents.

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